

GenCore version 5.1.6  
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OM nucleic - nucleic search, using sw model

Run on: March 1, 2004, 15:21:58 ; Search time 34 seconds  
(without alignments)

3.354 Million cell updates/sec

Title: us-09-695-451-1

Perfect score: 2161

Sequence: 1 tggccagtgatctgaacc.....tacactaaaattctgaagtt 2161

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 0.5

Searched: 1664 segs, 26385 residues

Total number of hits satisfying chosen parameters: 3328

Minimum DB seq length: 8

Maximum DB seq length: 80

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 1745 summaries

Database : rng.seq.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match %	Length	ID	Description
C 1	25	1.2	25	1	Reverse primer use
C 2	23.8	1.1	29	1	Human 55kDa tumour
C 3	23.8	1.1	29	1	Human 55 kD TNFpB
C 4	21	1.0	21	1	Primer for TPO/hCG
C 5	21	1.0	21	1	Tumour differentiation
C 6	21	1.0	29	1	Human TNFRI PCR pr
C 7	20.8	1.0	24	1	Multimerisation of
C 8	20	0.9	28	1	Antisense PCR prim
C 9	19.2	0.9	24	1	Multimerisation of
C 10	19.2	0.9	27	1	PCR primer used to
C 11	18.8	0.9	24	1	Multimerisation of
C 12	18.2	0.8	23	1	Cell-TRAP method a
C 13	18.2	0.8	25	1	HSV replication in
C 14	18.2	0.8	25	1	HSV replication in
C 15	18.2	0.8	25	1	Peptide nucleic ac
C 16	18	0.8	18	1	p55 extracellular
C 17	18	0.8	18	1	3' primer for p55
C 18	18	0.8	18	1	Primer used to con
C 19	18	0.8	18	1	Human TNFRI mRNA i
C 20	18	0.8	18	1	Human TNFRI mRNA i
C 21	18	0.8	18	1	Human TNFRI mRNA i
C 22	18	0.8	18	1	Human TNFRI mRNA i
C 23	18	0.8	18	1	Human TNFRI mRNA i
C 24	18	0.8	18	1	Human TNFRI mRNA i
C 25	18	0.8	18	1	Human TNFRI mRNA i
C 26	18	0.8	18	1	Human TNFRI mRNA i
C 27	18	0.8	18	1	Human TNFRI mRNA i
C 28	18	0.8	18	1	Human TNFRI mRNA i
C 29	18	0.8	18	1	Human TNFRI mRNA i
C 30	18	0.8	18	1	Human TNFRI mRNA i
C 31	18	0.8	18	1	Human TNFRI mRNA i
C 32	18	0.8	18	1	Human TNFRI mRNA i
C 33	18	0.8	18	1	Human TNFRI mRNA i

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1	AAZ48529	18	0.8	18	Human TNFRI mRNA i
1	AAZ48543	18	0.8	18	Human TNFRI mRNA i
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1	AAZ48523	18	0.8	18	Human TNFRI mRNA i
1	AAZ48536	18	0.8	18	Human TNFRI mRNA i
1	AAZ48542	18	0.8	18	Human TNFRI mRNA i
1	AAZ48521	18	0.8	18	Human TNFRI mRNA i
1	AAZ48531	18	0.8	18	Human TNFRI mRNA i
1	AAZ48530	18	0.8	18	Human TNFRI mRNA i
1	AAI65708	18	0.8	18	PCR primer used to
1	AAI18201	18	0.8	18	p55 heavy chain fu
1	AAH78601	18	0.8	18	PCR primer used to
1	AB54265	18	0.8	18	Human p55 heavy/li
1	AB54265	18	0.8	18	TNFRI expression m
1	ABT05032	18	0.8	18	TNFRI expression m
1	ABT05034	18	0.8	18	TNFRI expression m
1	ABT05037	18	0.8	18	TNFRI expression m
1	ABT05107	18	0.8	18	TNFRI expression m
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1	ABT05109	18	0.8	18	TNFRI expression m
1	ABT05026	18	0.8	18	TNFRI expression m
1	ABT05029	18	0.8	18	TNFRI expression m
1	ABT05081	18	0.8	18	TNFRI expression m
1	ABT05103	18	0.8	18	TNFRI expression m
1	ABT05086	18	0.8	18	TNFRI expression m
1	ABT05088	18	0.8	18	TNFRI expression m
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1	ABT05030	18	0.8	18	TNFRI expression m
1	ABT05038	18	0.8	18	TNFRI expression m
1	ABT05082	18	0.8	18	TNFRI expression m
1	ABT05085	18	0.8	18	TNFRI expression m
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1	ABT05036	18	0.8	18	TNFRI expression m
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1	ABT05083	18	0.8	18	TNFRI expression m
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1	ABT05018	18	0.8	18	TNFRI expression m
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1	ABT05110	18	0.8	18	TNFRI expression m
1	ABT05114	18	0.8	18	TNFRI expression m
1	ABT05092	18	0.8	18	TNFRI expression m
1	ABT05095	18	0.8	18	TNFRI expression m
1	ABT05104	18	0.8	18	TNFRI expression m
1	ABV73805	18	0.8	18	Human tumour necro
1	AAI72618	18	0.8	18	p55 fusion protein

C 107 18 0.8 18 1 ACA61161 Human TNF-alpha re  
 C 108 18 0.8 18 1 ABX14797 p55 extracellular  
 C 109 18 0.8 18 1 ABX11358 PCR primer, #8, us  
 C 110 18 0.8 18 1 ABX11374 PCR primer, #7, us  
 C 111 18 0.8 18 1 AD28380 Human p55 extracel  
 C 112 18 0.8 18 1 ADC46582 Heavy chain fusion  
 C 113 18 0.8 18 1 ADC61368 PCR primer #2 used  
 C 114 18 0.8 18 1 ADD44668 p55 extracellular  
 C 115 18 0.8 18 1 AAZ48498 Human TNFRI mRNA i  
 C 116 18 0.8 18 1 ABT04594 TNFRI expression m  
 C 117 18 0.8 24 1 AAT30782 TNF-RI cytoplasmic  
 C 118 17.8 0.8 23 1 AAQ03929 HPV11 typing probe  
 C 119 17.8 0.8 23 1 AAQ03928 HPV11 typing probe  
 C 120 17.8 0.8 23 1 AAQ56399 L1 consensus prime  
 C 121 17.8 0.8 23 1 AAQ56400 L1 consensus prime  
 C 122 17.8 0.8 23 1 AAT10824 Human papilloma vi  
 C 123 17.8 0.8 23 1 AAT10825 Human papilloma vi  
 C 124 17.8 0.8 23 1 AAT44771 HPV typing probe W  
 C 125 17.8 0.8 23 1 AAT44770 HPV typing probe W  
 C 126 17.8 0.8 23 1 AAT78015 Human papillomavir  
 C 127 17.8 0.8 23 1 AAT78014 Human papillomavir  
 C 128 17.8 0.8 23 1 AAV17415 Probe WD151 for hu  
 C 129 17.8 0.8 23 1 AAV17414 Probe WD150 for hu  
 C 130 17.8 0.8 24 1 AAV55819 Multimerisation of  
 C 131 17.8 0.8 24 1 ABE68055 G4 phosphorothioat  
 C 132 17.6 0.8 24 1 ABE68055 Human protein ref  
 C 133 17.4 0.8 20 1 ABT05167 TNFRI expression m  
 C 134 17.2 0.8 22 1 AAQ61991 Guanine quartet co  
 C 135 17.2 0.8 22 1 AAQ61991 Guanine quartet co  
 C 136 17.2 0.8 22 1 AAQ61895 HSV replication in  
 C 137 17.2 0.8 22 1 AAQ61903 Peptide nucleic ac  
 C 138 17.2 0.8 22 1 AAQ97987 Anti-HSV-1 G4 olig  
 C 139 17.2 0.8 24 1 AAQ61902 HSV replication in  
 C 140 17.2 0.8 24 1 AAQ61990 Guanine quartet co  
 C 141 17.2 0.8 24 1 AAQ61894 HSV replication in  
 C 142 17.2 0.8 24 1 AAQ61997 Guanine quartet co  
 C 143 17.2 0.8 24 1 AAQ97981 Peptide nucleic ac  
 C 144 17.2 0.8 24 1 AAT39967 Minimal motif codi  
 C 145 17.2 0.8 24 1 AAV55813 Multimerisation of  
 C 146 17.2 0.8 24 1 ADB68048 G4 phosphorothioat  
 C 147 17.2 0.8 24 1 ADB68048 TNFRI expression m  
 C 148 17 0.8 18 1 ABT05122 Mouse HYPLIPI locu  
 C 149 16.8 0.8 21 1 ABK68350 Murine Spot14 codi  
 C 150 16.8 0.8 21 1 AAL49018 Mouse HYPLIPI locu  
 C 151 16.8 0.8 21 1 ABK71254 Mouse HYPLIPI locu  
 C 152 16.8 0.8 21 1 ADA15393 Mouse HYPLIPI locu  
 C 153 16.8 0.8 21 1 ADB95955 Mouse HYPLIPI PCR  
 C 154 16.4 0.8 18 1 ABT05121 TNFRI expression m  
 C 155 16.2 0.7 21 1 AAH62672 Glucosidase alpha  
 C 156 15 0.7 18 1 ABT05123 TNFRI expression m  
 C 157 15.8 0.7 20 1 ABT05169 TNFRI expression m  
 C 158 15.8 0.7 20 1 ABT05171 TNFRI expression m  
 C 159 15.8 0.7 20 1 ABZ87732 Human oligonucleot  
 C 160 15.8 0.7 20 1 ACF39510 BARCODE-WAT HPV re  
 C 161 15.8 0.7 22 1 AAV51522 Zea mays genome fo  
 C 162 15.8 0.7 22 1 RAD54478 Soybean RRS gene N  
 C 163 15.6 0.7 22 1 AAX71903 Soybean cytochrome  
 C 164 15.6 0.7 22 1 AAX71903 RRS nucleic acid f  
 C 165 15.6 0.7 22 1 AAX74507 Mouse flt-1 VEGF r  
 C 166 15.4 0.7 17 1 ACD50663 HBV hammerhead rib  
 C 167 15.4 0.7 18 1 AAT16398 Primer #1 for swSS  
 C 168 15.4 0.7 18 1 AAT16398 Human OB gene sequ  
 C 169 15.4 0.7 18 1 AAC62593 Human OB DNA PCR p  
 C 170 15.4 0.7 18 1 AAC62673 Human OB gene sequ  
 C 171 15.4 0.7 18 1 ABL61421 Human sequence tag  
 C 172 15.4 0.7 18 1 ABX89547 Human OB gene STS  
 C 173 15.4 0.7 18 1 ABX89547 Human obese (ob) g  
 C 174 15.4 0.7 18 1 ABX89547 Cyclin B1 ribozyme  
 C 175 15.4 0.7 19 1 AAAB5678 Cyclin B1 ribozyme  
 C 176 15.4 0.7 19 1 AAH60840 Anti-HSV-1 G4 olig  
 C 177 15.4 0.7 20 1 AAQ73379 Guanine quartet co  
 C 178 15.4 0.7 20 1 AAQ61999 HSV replication in  
 C 179 15.4 0.7 20 1 AAQ61896

C 180 15.4 0.7 20 1 AAQ61995 Guanine quartet co  
 C 181 15.4 0.7 20 1 AAQ61904 HSV replication in  
 C 182 15.4 0.7 20 1 AAQ97982 Peptide nucleic ac  
 C 183 15.4 0.7 20 1 AAF56086 HBV DNA polymerase  
 C 184 15.4 0.7 20 1 ABQ92981 T. tauschii/wheat  
 C 185 15.2 0.7 20 1 AAZ56188 Anticense oligonuc  
 C 186 15.2 0.7 20 1 ABS55159 Cow calpastatin (C  
 C 187 15.2 0.7 20 1 ABX12684 Human IL-4/IL-13 r  
 C 188 15.2 0.7 20 1 ADB97971 Human K-Ras codon  
 C 189 15.2 0.7 21 1 AAZ74370 Human biallelic ma  
 C 190 15.2 0.7 21 1 ABS98379 Human multidrug re  
 C 191 15 0.7 18 1 AAV14108 Probe HBPr274 for  
 C 192 15 0.7 18 1 ABT05120 TNFRI expression m  
 C 193 15 0.7 19 1 AAV10706 Human breast cance  
 C 194 15 0.7 20 1 AAV14301 Probe HBPr135 for  
 C 195 15 0.7 20 1 AAD09117 Hepatitis B virus  
 C 196 15 0.7 20 1 AAH77555 Hepatitis B virus  
 C 197 14.8 0.7 18 1 AAT90589 S' PCR primer for  
 C 198 14.8 0.7 18 1 AAH13406 Hepatitis C virus  
 C 199 14.8 0.7 18 1 ABX74325 Dog genomic marker  
 C 200 14.8 0.7 19 1 AAA66673 Human CYP2C8 SNP d  
 C 201 14.8 0.7 19 1 ACA98830 Human CYP2C8 SNP d  
 C 202 14.8 0.7 19 1 ACA98827 Forward primer for  
 C 203 14.8 0.7 20 1 AAA07660 Human PARP-3 antis  
 C 204 14.8 0.7 20 1 AAS45887 PCR primer #5, to  
 C 205 14.8 0.7 20 1 AAD19265 PCR primer #1, to  
 C 206 14.8 0.7 20 1 AAD19261 PCR primer #3, to  
 C 207 14.8 0.7 20 1 AAD19263 Fanconi anaemia FA  
 C 208 14.8 0.7 20 1 ABL58392 Human PDE7a3 spli  
 C 209 14.8 0.7 20 1 ABT13217 Capture oligonucle  
 C 210 14.8 0.7 20 1 ABT13217 Human NOV7 forward  
 C 211 14.8 0.7 20 1 ABN86953 Mouse phospholipid  
 C 212 14.8 0.7 20 1 AAD49357 FANCD2 PCR primer  
 C 213 14.8 0.7 20 1 ADC42454 Anticense oligonuc  
 C 214 14.8 0.7 21 1 AAQ58370 Recombinant HIV-1  
 C 215 14.8 0.7 21 1 AAQ58370 HIV-1  
 C 216 14.8 0.7 21 1 AAF82554 RT-PCR primer #2 f  
 C 217 14.8 0.7 21 1 ADE13666 PCR primer for det  
 C 218 14.8 0.7 21 1 ADE86064 Anti-HSV-1 G4 olig  
 C 219 14.4 0.7 16 1 AAQ73380 Guanine quartet co  
 C 220 14.4 0.7 16 1 AAQ61993 HSV replication in  
 C 221 14.4 0.7 16 1 AAQ61898 HIV replication in  
 C 222 14.4 0.7 16 1 AAQ61914 Peptide nucleic ac  
 C 223 14.4 0.7 16 1 AAQ97986 Human NKG2B inozyme  
 C 224 14.4 0.7 17 1 ABK00810 Human tumour suppr  
 C 225 14.4 0.7 17 1 ACC51738 PCR primer #14 use  
 C 226 14.4 0.7 17 1 AAD53249 HBV hammerhead rib  
 C 227 14.4 0.7 17 1 ACD50662 Thermus scotoductu  
 C 228 14.4 0.7 17 1 ADA50406 Tumour suppressi  
 C 229 14.4 0.7 17 1 AAT79937 Tumour suppressi  
 C 230 14.4 0.7 17 1 ADB44463 Anti-HSV-1 G4 olig  
 C 231 14.4 0.7 18 1 AAQ73381 Guanine quartet co  
 C 232 14.4 0.7 18 1 AAQ61992 HSV replication in  
 C 233 14.4 0.7 18 1 AAQ61897 HIV replication in  
 C 234 14.4 0.7 18 1 AAQ61913 Peptide nucleic ac  
 C 235 14.4 0.7 18 1 AAQ97983 Primer oligo used  
 C 236 14.4 0.7 18 1 ACD70187 Cyclin B1 ribozyme  
 C 237 14.4 0.7 19 1 AAA38182 Cyclin B1 ribozyme  
 C 238 14.4 0.7 19 1 AAH60839 Human CYP2C8 SNP d  
 C 239 14.4 0.7 19 1 ACA98826 Human CYP2C8 SNP d  
 C 240 14.4 0.7 19 1 AAT7852 Human HCV RNA antl  
 C 241 14.4 0.7 20 1 AAV19519 Retroviral DNA bas  
 C 242 14.4 0.7 20 1 AAV19519 Flax SAD gene prom  
 C 243 14.4 0.7 20 1 AAV22562 Anticense oligonuc  
 C 244 14.4 0.7 20 1 AAQ69238 Human ABC1 gene ex  
 C 245 14.4 0.7 20 1 AAQ69238 Ribonucleotide red  
 C 246 14.4 0.7 20 1 AAA90791 Human 52F transcri  
 C 247 14.4 0.7 20 1 AAQ67181 Human ankryrin 4 cd  
 C 248 14.4 0.7 20 1 AAQ67181 Cdc 25 hs ribozyme  
 C 249 14.4 0.7 20 1 AAQ67181 Bacterial cell ide  
 C 250 14.4 0.7 20 1 AAQ67181  
 C 251 14.2 0.7 19 1 AAH85941  
 C 252 14.2 0.7 19 1 AAD16173

Guanine quartet co  
 HSV replication in  
 Peptide nucleic ac  
 HBV DNA polymerase  
 T. tauschii/wheat  
 Anticense oligonuc  
 Cow calpastatin (C  
 Human IL-4/IL-13 r  
 Human K-Ras codon  
 Human biallelic ma  
 Human multidrug re  
 Probe HBPr274 for  
 TNFRI expression m  
 Human breast cance  
 Probe HBPr135 for  
 Hepatitis B virus  
 Hepatitis B virus  
 S' PCR primer for  
 Hepatitis C virus  
 Dog genomic marker  
 Human CYP2C8 SNP d  
 Human CYP2C8 SNP d  
 Forward primer for  
 Human PARP-3 antis  
 PCR primer #5, to  
 PCR primer #1, to  
 PCR primer #3, to  
 Fanconi anaemia FA  
 Human PDE7a3 spli  
 Capture oligonucle  
 Human NOV7 forward  
 Mouse phospholipid  
 FANCD2 PCR primer  
 Anticense oligonuc  
 Recombinant HIV-1  
 HIV-1  
 RT-PCR primer #2 f  
 PCR primer for det  
 Anti-HSV-1 G4 olig  
 Guanine quartet co  
 HSV replication in  
 HIV replication in  
 Peptide nucleic ac  
 Human NKG2B inozyme  
 Human tumour suppr  
 PCR primer #14 use  
 HBV hammerhead rib  
 HBV hammerhead rib  
 Thermus scotoductu  
 Tumour suppressi  
 Tumour suppressi  
 Anti-HSV-1 G4 olig  
 Guanine quartet co  
 HSV replication in  
 HIV replication in  
 Peptide nucleic ac  
 Primer oligo used  
 Cyclin B1 ribozyme  
 Cyclin B1 ribozyme  
 Human CYP2C8 SNP d  
 Human CYP2C8 SNP d  
 Human HCV RNA antl  
 Retroviral DNA bas  
 Flax SAD gene prom  
 Anticense oligonuc  
 Human ABC1 gene ex  
 Ribonucleotide red  
 Human 52F transcri  
 Human ankryrin 4 cd  
 Cdc 25 hs ribozyme  
 Bacterial cell ide



C 253	14.2	0.7	19	1	AAH61103	Cdc25 hs ribozyme	326	13.4	0.6	18	1	AA270729	Human biallelic ma
C 254	14.2	0.7	19	1	AA270533	Human DRD2 fragmen	C 327	13.4	0.6	18	1	AB275036	Mus musculus/Mus s
C 255	14.2	0.7	19	1	AA274745	Human TREK-2 gene	C 328	13.4	0.6	18	1	ACC79763	Mouise POGFR-beta a
C 256	14.2	0.7	20	1	AAV11921	Hepatocyte growth	C 329	13.4	0.6	18	1	ADB54870	Hybridisation olig
C 257	14.2	0.7	20	1	AAV11923	Hepatocyte growth	C 330	13.4	0.6	18	1	ADB43557	Human IDE sequenci
C 258	14.2	0.7	20	1	AAZ11995	Human uncoupling p	C 331	13.4	0.6	19	1	AAQ20002	Oligomer A2-A able
C 259	14.2	0.7	20	1	AAZ96519	PCR primer used to	C 332	13.4	0.6	19	1	AAQ08895	Human biallelic po
C 260	14.2	0.7	20	1	AAZ95335	PCR primer used to	C 333	13.4	0.6	19	1	AAZ72906	Human biallelic ma
C 261	14.2	0.7	20	1	AAZ93087	PCR primer used to	C 334	13.4	0.6	19	1	AAZ72906	Human biallelic ma
C 262	14.2	0.7	20	1	AAZ97571	HIV-1 protease gen	C 335	13.4	0.6	19	1	AAZ72906	Cryptosporidium pa
C 263	14.2	0.7	20	1	AAZ72760	Human biallelic ma	C 336	13.4	0.6	19	1	AAZ72906	Lam K U primer SEQ
C 264	14.2	0.7	20	1	AAH491172	Human procaltcitoni	C 337	13.4	0.6	19	1	AAZ91977	Single nucleotide
C 265	14.2	0.7	20	1	AAZ21385	Antisense oligo, H	C 338	13.4	0.6	19	1	AAZ91977	Human IIS-R oligon
C 266	14.2	0.7	20	1	AAZ310573	Human glioma-associ	C 339	13.4	0.6	19	1	AAZ91977	Human CYP2C8 SNP d
C 267	14.2	0.7	20	1	ABV73834	Human MKK4 antisense	C 340	13.4	0.6	19	1	AAZ91977	Human CYP2C8 SNP d
C 268	14.2	0.7	20	1	ABV73834	Phosphorothioate o	C 341	13.4	0.6	19	1	AAZ91977	Human RAD54 mutat
C 269	14.2	0.7	20	1	ABV73834	Human oligonucleot	C 342	13.2	0.6	18	1	AAZ91977	RT-PCR primer spec
C 270	14.2	0.7	20	1	ABV73834	Human oligonucleot	C 343	13.2	0.6	18	1	AAZ91977	Homeobox conserved
C 271	14.2	0.7	20	1	ABV73834	Antisense oligonuc	C 344	13.2	0.6	18	1	AAZ91977	Human chromosome a
C 272	14.2	0.7	20	1	ABV73834	Human mucin 1 tran	C 345	13.2	0.6	18	1	AAZ91977	Human CD40 phospho
C 273	14.2	0.7	20	1	AAZ91977	Human GH-1 gene am	C 346	13.2	0.6	18	1	AAZ91977	Human Elk-1 phosph
C 274	14.2	0.7	20	1	AAZ91977	Tumour suppression	C 347	13.2	0.6	18	1	AAZ91977	Human HM1.24 anti-g
C 275	14.2	0.7	20	1	AAZ91977	Probe HBP276 for	C 348	13.2	0.6	18	1	AAZ91977	ELK-1 expression m
C 276	14.2	0.7	20	1	AAZ91977	Human Werner's syn	C 349	13.2	0.6	18	1	AAZ91977	Reverse primer for
C 277	14.2	0.7	20	1	AAZ91977	Human JAZF1 PCR pr	C 350	13.2	0.6	18	1	AAZ91977	Human CD40 antisen
C 278	13.8	0.6	17	1	AAV97281	Human EGF-R target	C 351	13.2	0.6	18	1	AAZ91977	Human biallelic ma
C 279	13.8	0.6	17	1	AAZ231120	Integrin subunit b	C 352	13.2	0.6	18	1	AAZ91977	Human long QT synd
C 280	13.8	0.6	17	1	AAZ231133	Integrin subunit b	C 353	13.2	0.6	18	1	AAZ91977	Single nucleotide
C 281	13.8	0.6	17	1	AAZ231133	Integrin subunit b	C 354	13.2	0.6	18	1	AAZ91977	Single nucleotide
C 282	13.8	0.6	17	1	AAZ231133	Human CD20 Zinzyne	C 355	13.2	0.6	18	1	AAZ91977	Single nucleotide
C 283	13.8	0.6	17	1	AAZ231133	Human GDMPL-1 17-m	C 356	13.2	0.6	18	1	AAZ91977	Human KVLQTI exon
C 284	13.8	0.6	17	1	AAZ231133	Human GDMPL-1 17-m	C 357	13.2	0.6	18	1	AAZ91977	Drosophila rot gen
C 285	13.8	0.6	17	1	AAZ231133	Human ERG Amberyzm	C 358	13.2	0.6	18	1	AAZ91977	PCR primer #1 for
C 286	13.8	0.6	17	1	AAZ231133	Tumour suppression	C 359	13.2	0.6	18	1	AAZ91977	Human KNSL1 PCR pr
C 287	13.8	0.6	17	1	AAZ231133	NFKB sub-unit modu	C 360	13.2	0.6	18	1	AAZ91977	Human KNSL1 sequen
C 288	13.8	0.6	17	1	AAZ231133	Human H-Ras DNazym	C 361	13.2	0.6	18	1	AAZ91977	Mouise HYPLIPI1 locu
C 289	13.8	0.6	17	1	AAZ231133	Human HER2 DNazym	C 362	13.2	0.6	21	1	AAZ91977	Mouise HYPLIPI1 locu
C 290	13.8	0.6	17	1	AAZ231133	HCV DNazyme substr	C 363	13.2	0.6	21	1	AAZ91977	Mouise HYPLIPI1 locu
C 291	13.8	0.6	18	1	AAQ70337	Antisense oligonuc	C 364	13.2	0.6	21	1	AAZ91977	Mouise HYPLIPI1 PCR
C 292	13.8	0.6	18	1	AAQ70337	Human Class I HLA	C 365	13.2	0.6	21	1	AAZ91977	Mouise HYPLIPI1 PCR
C 293	13.8	0.6	18	1	AAQ70337	Hybridisation prob	C 366	13.2	0.6	13	1	AAZ91977	Oligonucleotide SE
C 294	13.8	0.6	18	1	AAQ70337	Zinc finger coding	C 367	13.2	0.6	13	1	AAZ91977	Oligonucleotide SE
C 295	13.8	0.6	18	1	AAQ70337	Human chromosome 1	C 368	13.2	0.6	13	1	AAZ91977	Oligonucleotide SE
C 296	13.8	0.6	19	1	AAQ70337	Human angiotensino	C 369	13.2	0.6	13	1	AAZ91977	Oligonucleotide SE
C 297	13.8	0.6	19	1	AAQ70337	Human angiotensino	C 370	13.2	0.6	15	1	AAZ91977	Oligonucleotide SE
C 298	13.8	0.6	15	1	AAQ70337	IGFBP3 oligonucleo	C 371	13.2	0.6	15	1	AAZ91977	PCR primer #12 for
C 299	13.4	0.6	15	1	AAQ70337	IGFBP3 oligonucleo	C 372	13.2	0.6	15	1	AAZ91977	Mouise B7-1 hamern
C 300	13.4	0.6	15	1	AAQ70337	IGFBP3 oligonucleo	C 373	13.2	0.6	15	1	AAZ91977	Mouise B7-1 hamern
C 301	13.4	0.6	15	1	AAQ70337	IGFBP3 oligonucleo	C 374	13.2	0.6	15	1	AAZ91977	Mouise B7-1 hamern
C 302	13.4	0.6	16	1	AAQ70337	Type B ammonia-oxi	C 375	13.2	0.6	15	1	AAZ91977	IGFBP3 oligonucleo
C 303	13.4	0.6	17	1	AAQ70337	Single nucleotide	C 376	13.2	0.6	15	1	AAZ91977	Human c-myp hamern
C 304	13.4	0.6	17	1	AAQ70337	Single nucleotide	C 377	13.2	0.6	17	1	AAZ91977	Human NCO Ambery
C 305	13.4	0.6	17	1	AAQ70337	Hammerhead ribozym	C 378	13.2	0.6	17	1	AAZ91977	Human chromosome 1
C 306	13.4	0.6	17	1	AAQ70337	Human NCO Ambery	C 379	13.2	0.6	17	1	AAZ91977	Tumour suppression
C 307	13.4	0.6	17	1	AAQ70337	Human NCO Ambery	C 380	13.2	0.6	17	1	AAZ91977	Human NOVX reverse
C 308	13.4	0.6	17	1	AAQ70337	Retinoblastoma mut	C 381	13.2	0.6	18	1	AAZ91977	PCR primer #20, us
C 309	13.4	0.6	17	1	AAQ70337	Retinoblastoma mut	C 382	13.2	0.6	18	1	AAZ91977	TNFRI expression m
C 310	13.4	0.6	17	1	AAQ70337	Human GDMPL-1 17-m	C 383	12.8	0.6	24	1	AAZ91977	Multimerisation of
C 311	13.4	0.6	17	1	AAQ70337	Human GDMPL-1 17-m	C 384	12.8	0.6	16	1	AAZ91977	Streptomyces sp. 9
C 312	13.4	0.6	17	1	AAQ70337	Human ERG DNazyme	C 385	12.8	0.6	16	1	AAZ91977	Human leukocyte an
C 313	13.4	0.6	17	1	AAQ70337	Tumour suppression	C 386	12.8	0.6	17	1	AAZ91977	Rat ICAM hammerhea
C 314	13.4	0.6	17	1	AAQ70337	Tumour suppression	C 387	12.8	0.6	17	1	AAZ91977	Rat ICAM hammerhea
C 315	13.4	0.6	17	1	AAQ70337	Tumour suppression	C 388	12.8	0.6	17	1	AAZ91977	Rat ICAM hammerhea
C 316	13.4	0.6	17	1	AAQ70337	HBV G-cleaver subs	C 389	12.8	0.6	17	1	AAZ91977	Mouise filk-1 VEGF r
C 317	13.4	0.6	17	1	AAQ70337	HBV inozyme substr	C 390	12.8	0.6	17	1	AAZ91977	Human EGF-R target
C 318	13.4	0.6	17	1	AAQ70337	Tumour suppression	C 391	12.8	0.6	17	1	AAZ91977	Humanised anti-HM1
C 319	13.4	0.6	17	1	AAQ70337	Tumour suppression	C 392	12.8	0.6	17	1	AAZ91977	Primer used in con
C 320	13.4	0.6	17	1	AAQ70337	Tumour suppression	C 393	12.8	0.6	17	1	AAZ91977	Arly hydrocarbon n
C 321	13.4	0.6	18	1	AAV14107	Probe HBP+273 for	C 394	12.8	0.6	17	1	AAZ91977	Arly hydrocarbon n
C 322	13.4	0.6	18	1	AAV14107	Probe HBP+270 for	C 395	12.8	0.6	17	1	AAZ91977	Arly hydrocarbon n
C 323	13.4	0.6	18	1	AAV14107	Probe HBP+272 for	C 396	12.8	0.6	17	1	AAZ91977	Hammerhead ribozym
C 324	13.4	0.6	18	1	AAV14107	Probe HBP+272 for	C 397	12.8	0.6	17	1	AAZ91977	Human NCO Ambery
C 325	13.4	0.6	18	1	AAZ222160	Human c-IAP-1 mRNA	C 398	12.8	0.6	17	1	AAZ91977	Factor IX mutation

C 399	12.8	0.6	17	1	ABAV9720	Factor IX mutation	472	12.4	0.6	14	1	AAV22315	14 base loop seque
C 400	12.8	0.6	17	1	ABAV9724	Factor IX mutation	473	12.4	0.6	14	1	AAV57019	Human Notch3 gene
C 401	12.8	0.6	17	1	ABAV9725	Factor IX mutation	474	12.4	0.6	14	1	ABK99293	Hepatitis C virus
C 402	12.8	0.6	17	1	ABAV9721	Factor IX mutation	475	12.4	0.6	14	1	ADE13944	Optineurin promote
C 403	12.8	0.6	17	1	ABN02791	Human GDMPLP-1 17-m	C 476	12.4	0.6	15	1	AAQ30739	DNA/RNA expression
C 404	12.8	0.6	17	1	ABN00978	Human GDMPLP-1 17-m	C 477	12.4	0.6	15	1	AAQ30739	DNA/RNA expression
C 405	12.8	0.6	17	1	ABN02790	Human GDMPLP-1 17-m	C 478	12.4	0.6	15	1	AAQ30739	DNA EDTA probe (8)
C 406	12.8	0.6	17	1	ABV83095	Human HTPL scannin	C 479	12.4	0.6	15	1	AAQ30739	Target DNA for pvr
C 407	12.8	0.6	17	1	ABV79664	Human HTPL scannin	C 480	12.4	0.6	15	1	AAQ30739	Ab6 variable heavy
C 408	12.8	0.6	17	1	ABV79665	Human HTPL scannin	C 481	12.4	0.6	15	1	AAQ30739	Substrate for HH r
C 409	12.8	0.6	17	1	ABV83096	Human HTPL scannin	C 482	12.4	0.6	15	1	AAQ30739	Hepatitis C virus
C 410	12.8	0.6	17	1	ABV80008	Human HTPL scannin	C 483	12.4	0.6	15	1	AAQ30739	IGFBP3 oligonucleo
C 411	12.8	0.6	17	1	ABV80009	Human HTPL scannin	C 484	12.4	0.6	15	1	AAQ30739	IGFBP3 oligonucleo
C 412	12.8	0.6	17	1	ABK19288	Human HTPL scannin	C 485	12.4	0.6	15	1	AAQ30739	IGF-1 oligonucleo
C 413	12.8	0.6	17	1	ABK19007	Human ERG DNazyme	C 486	12.4	0.6	15	1	AAQ30739	IGFBP2 oligonucleo
C 414	12.8	0.6	17	1	ABL31567	Human HLA genotypi	C 487	12.4	0.6	15	1	AAQ30739	IGFBP2 oligonucleo
C 415	12.8	0.6	17	1	ADL48146	DNA P target DNA u	C 488	12.4	0.6	15	1	AAQ30739	IGF-1 oligonucleo
C 416	12.8	0.6	17	1	ABT38079	Tumour suppression	C 489	12.4	0.6	15	1	AAQ30739	IGFBP2 oligonucleo
C 417	12.8	0.6	17	1	ACA06572	NFKB sub-unit modu	C 490	12.4	0.6	15	1	AAQ30739	IGFBP2 oligonucleo
C 418	12.8	0.6	17	1	ACA08290	NFKB sub-unit modu	C 491	12.4	0.6	15	1	AAQ30739	IGF-1 oligonucleo
C 419	12.8	0.6	17	1	ACA06571	NFKB sub-unit modu	C 492	12.4	0.6	15	1	AAQ30739	IGFBP2 oligonucleo
C 420	12.8	0.6	17	1	ACA06765	NFKB sub-unit modu	C 493	12.4	0.6	15	1	AAQ30739	Hepatitis C virus
C 421	12.8	0.6	17	1	ACA06256	NFKB sub-unit modu	C 494	12.4	0.6	15	1	AAQ30739	Hepatitis C virus
C 422	12.8	0.6	17	1	ACB06763	NFKB sub-unit modu	C 495	12.4	0.6	15	1	AAQ30739	Sequence specific
C 423	12.8	0.6	17	1	ADB04345	Human MD27 scannin	C 496	12.4	0.6	15	1	AAQ30739	DNA footprint ta
C 424	12.8	0.6	17	1	ADB04344	Human MD27 scannin	C 497	12.4	0.6	15	1	AAQ30739	Synthetic nucleas
C 425	12.8	0.6	17	1	ADB05115	Human MD212 scanni	C 498	12.4	0.6	15	1	AAQ30739	Beta-3-Gla T3 exon
C 426	12.8	0.6	17	1	ADA99613	Human MD23 scannin	C 499	12.4	0.6	15	1	AAQ30739	Validation ribozym
C 427	12.8	0.6	17	1	ADB05114	Human MD23 scannin	C 500	12.4	0.6	15	1	AAQ30739	Human NOGO Ambery
C 428	12.8	0.6	17	1	ADA99614	Human MD23 scannin	C 501	12.4	0.6	15	1	AAQ30739	Human c-myb hamme
C 429	12.8	0.6	17	1	ABZ64922	Human HER2 DNazyme	C 502	12.4	0.6	15	1	AAQ30739	Mouse flt-1 VEGF r
C 430	12.8	0.6	17	1	ABZ61891	Human H-Ras DNazyme	C 503	12.4	0.6	15	1	AAQ30739	Human flt1 VEGF re
C 431	12.8	0.6	17	1	ABZ60690	Human K-Ras DNazyme	C 504	12.4	0.6	15	1	AAQ30739	Granule bound star
C 432	12.8	0.6	17	1	ABZ64908	Human HER2 DNazyme	C 505	12.4	0.6	15	1	AAQ30739	Human EGF-R target
C 433	12.8	0.6	17	1	ACD63373	HCV minus strand D	C 506	12.4	0.6	15	1	AAQ30739	Human Toso protein
C 434	12.8	0.6	17	1	ACD82296	HCV minus strand D	C 507	12.4	0.6	15	1	AAQ30739	Integrin subunit b
C 435	12.8	0.6	17	1	ACD54753	Human DNazyme substr	C 508	12.4	0.6	15	1	AAQ30739	Integrin subunit b
C 436	12.8	0.6	17	1	ACG64156	Murine oligonucleo	C 509	12.4	0.6	15	1	AAQ30739	Human Toso PCR pri
C 437	12.8	0.6	17	1	ADB98958	LRP5 mutagenic PCR	C 510	12.4	0.6	15	1	AAQ30739	Hammerhead ribozym
C 438	12.8	0.6	17	1	ADB43905	Tumour suppression	C 511	12.4	0.6	15	1	AAQ30739	Hammerhead ribozym
C 439	12.8	0.6	17	1	ADC03565	Human Na/H exchange	C 512	12.4	0.6	15	1	AAQ30739	Human NOGO Inozyme
C 440	12.8	0.6	17	1	ADC03566	Human Na/H exchange	C 513	12.4	0.6	15	1	AAQ30739	Human NOGO Ambery
C 441	12.8	0.6	17	1	ADB44188	Tumour suppression	C 514	12.4	0.6	15	1	AAQ30739	Human NOGO Ambery
C 442	12.8	0.6	18	1	AAQ74284	Amyloid precursor	C 515	12.4	0.6	15	1	AAQ30739	Human NOGO Inozyme
C 443	12.8	0.6	18	1	AAV12463	Human HP4 prostagl	C 516	12.4	0.6	15	1	AAQ30739	Human NOGO Inozyme
C 444	12.8	0.6	18	1	AAV72786	Corn kernel oil co	C 517	12.4	0.6	15	1	AAQ30739	Human NOGO Inozyme
C 445	12.8	0.6	18	1	AAZ28111	PCR primer for M.	C 518	12.4	0.6	15	1	AAQ30739	Human NOGO DNazyme
C 446	12.8	0.6	18	1	AAZ41037	Cellular inhibitor	C 519	12.4	0.6	15	1	AAQ30739	Human NOGO Inozyme
C 447	12.8	0.6	18	1	AAZ40886	Human CD40 phospho	C 520	12.4	0.6	15	1	AAQ30739	HBV DNA polymerase
C 448	12.8	0.6	18	1	AAZ31867	Human G-alpha-13 a	C 521	12.4	0.6	15	1	AAQ30739	Oligonucleotide hy
C 449	12.8	0.6	18	1	AAZ22131	Human C-IAP-2 mRNA	C 522	12.4	0.6	15	1	AAQ30739	Oligonucleotide hy
C 450	12.8	0.6	18	1	AAZ47719	Human CD40 antisen	C 523	12.4	0.6	15	1	AAQ30739	Oligonucleotide hy
C 451	12.8	0.6	18	1	AAZ75429	Human biallelic ma	C 524	12.4	0.6	15	1	AAQ30739	Oligonucleotide hy
C 452	12.8	0.6	18	1	AAZ75429	Human biallelic ma	C 525	12.4	0.6	15	1	AAQ30739	Human GDMPLP-1 17-m
C 453	12.8	0.6	18	1	AAZ69900	Human biallelic ma	C 526	12.4	0.6	15	1	AAQ30739	Human GDMPLP-1 17-m
C 454	12.8	0.6	18	1	AAZ74653	PCR primer PFX520	C 527	12.4	0.6	15	1	AAQ30739	Human GDMPLP-1 17-m
C 455	12.8	0.6	18	1	AAZ74654	Midkine PCR primer	C 528	12.4	0.6	15	1	AAQ30739	Human GDMPLP-1 17-m
C 456	12.8	0.6	18	1	ABK25547	Human IGFBP-3 inte	C 529	12.4	0.6	15	1	AAQ30739	Human GDMPLP-1 17-m
C 457	12.8	0.6	18	1	ABK15756	Human HP4 prostagl	C 530	12.4	0.6	15	1	AAQ30739	Human GDMPLP-1 17-m
C 458	12.8	0.6	18	1	ABK15756	Prostaglandin rece	C 531	12.4	0.6	15	1	AAQ30739	Human HTPL scannin
C 459	12.8	0.6	18	1	ABK15756	Escherichia coli y	C 532	12.4	0.6	15	1	AAQ30739	Human HTPL scannin
C 460	12.8	0.6	18	1	ABK15756	PCR primer #2 for	C 533	12.4	0.6	15	1	AAQ30739	Human HTPL scannin
C 461	12.8	0.6	18	1	ACF62995	Human p16 PCR prim	C 534	12.4	0.6	15	1	AAQ30739	Human ERG hamme
C 462	12.8	0.6	18	1	ACF62993	Human p16 PCR prim	C 535	12.4	0.6	15	1	AAQ30739	Human ERG hamme
C 463	12.8	0.6	18	1	ABK394542	23S/16S rRNA detec	C 536	12.4	0.6	15	1	AAQ30739	Human ERG hamme
C 464	12.8	0.6	18	1	ABK394542	DM21 primer, to de	C 537	12.4	0.6	15	1	AAQ30739	Human ERG hamme
C 465	12.8	0.6	18	1	ABK394542	Hybridisation olig	C 538	12.4	0.6	15	1	AAQ30739	Human ERG DNazyme
C 466	12.8	0.6	18	1	ADC70136	Primer oligo used	C 539	12.4	0.6	15	1	AAQ30739	SPO11 gene forward
C 467	12.8	0.6	18	1	ADC70136	Primer oligo used	C 540	12.4	0.6	15	1	AAQ30739	Tumour suppression
C 468	12.8	0.6	18	1	AAD60507	Human c-IAP-2 anti	C 541	12.4	0.6	15	1	AAQ30739	Tumour suppression
C 469	12.8	0.6	18	1	ABZ97610	Human IL5-R oligon	C 542	12.4	0.6	15	1	AAQ30739	Tumour suppression
C 470	12.8	0.6	18	1	ABK55815	Multimerisation of	C 543	12.4	0.6	15	1	AAQ30739	Tumour suppression
C 471	12.6	0.6	15	1	ABK55815	Human LIPSE gene po	C 544	12.4	0.6	15	1	AAQ30739	NFKB sub-unit modu

C 545	12.4	17	1	ACA07870	NFKB sub-unit modu	C 618	12.2	0.6	17	1	AAA36202	Human genomic SNP
C 546	12.4	17	1	ACA08321	Necrosis factor ka	619	12.2	0.6	17	1	AAA95865	Human Ki-ras antis
C 547	12.4	17	1	ACA09069	NFKB sub-unit modu	C 620	12.2	0.6	17	1	AAZ60922	PCR primer, SEQ ID
C 548	12.4	17	1	ACA06257	NFKB sub-unit modu	621	12.2	0.6	17	1	AAA14476	PCR primer, SEQ ID
C 549	12.4	17	1	ACA08289	Necrosis factor ka	622	12.2	0.6	17	1	AAAF01972	Hammerhead ribozym
C 550	12.4	17	1	ABZ61864	Human H-Ras DNazym	623	12.2	0.6	17	1	AAAF01972	Hammerhead ribozym
C 551	12.4	17	1	ABZ64930	Human HER2 DNazym	C 624	12.2	0.6	17	1	AAAF02098	Hammerhead ribozym
C 552	12.4	17	1	ABZ61918	Human H-Ras DNazym	C 625	12.2	0.6	17	1	AAAF02098	Hammerhead ribozym
C 553	12.4	17	1	ABZ65382	Human HER2 DNazym	C 626	12.2	0.6	17	1	AAAF02059	Hammerhead ribozym
C 554	12.4	17	1	ABZ61530	Human H-Ras DNazym	C 627	12.2	0.6	17	1	AAAF01964	Hammerhead ribozym
C 555	12.4	17	1	ACD50661	HBV hammerhead rib	C 628	12.2	0.6	17	1	AAAF01742	Hammerhead ribozym
C 556	12.4	17	1	ACD65750	HCV minus strand D	629	12.2	0.6	17	1	AAAF02604	Hammerhead ribozym
C 557	12.4	17	1	ACD54040	HBV zinzyme substr	630	12.2	0.6	17	1	AAAF07190	Hammerhead ribozym
C 558	12.4	17	1	ACD55368	HBV amberzyme subs	631	12.2	0.6	17	1	AAAF01928	Hammerhead ribozym
C 559	12.4	17	1	ACD51586	HBV hammerhead rib	632	12.2	0.6	17	1	AAAF07012	Hammerhead ribozym
C 560	12.4	17	1	ACD51587	HBV hammerhead rib	C 633	12.2	0.6	17	1	AAAF01929	Hammerhead ribozym
C 561	12.4	17	1	ACD51587	HBV hammerhead rib	C 634	12.2	0.6	17	1	AAAF06045	Hammerhead ribozym
C 562	12.4	17	1	ACC67032	Murine oligonucleo	C 635	12.2	0.6	17	1	AAAF07060	Hammerhead ribozym
C 563	12.4	17	1	ADB42368	Tumour suppression	636	12.2	0.6	17	1	AAAF07118	Hammerhead ribozym
C 564	12.4	17	1	ADB43841	Tumour suppression	C 637	12.2	0.6	17	1	AAA705369	Shear Stress Respo
C 565	12.4	17	1	ADB40332	Tumour suppression	C 638	12.2	0.6	17	1	ABX03092	Human CD20 Inozyme
C 566	12.4	17	1	ADB41142	Tumour suppression	C 639	12.2	0.6	17	1	ABX01807	Human NOGO Zinzyme
C 567	12.4	17	1	ADB42329	Tumour suppression	C 640	12.2	0.6	17	1	ABA80784	LDLR mutation corr
C 568	12.4	17	1	ADB40653	Tumour suppression	C 641	12.2	0.6	17	1	ABA80785	LDLR mutation corr
C 569	12.4	17	1	ADC03827	Human Na/H exchang	C 642	12.2	0.6	17	1	AAC91135	Fungal pathogenic
C 570	12.4	17	1	ADC03824	Human Na/H exchang	C 643	12.2	0.6	17	1	AAC91135	Human TNF-308 alle
C 571	12.4	17	1	ADC03826	Human Na/H exchang	644	12.2	0.6	17	1	AAF54961	5' primer used to
C 572	12.4	17	1	ADC03825	Human Na/H exchang	C 645	12.2	0.6	17	1	AAF54961	Probe FN(n)G used
C 573	12.4	17	1	ADB45380	Tumour suppression	C 646	12.2	0.6	17	1	ABX83170	CGMV RT-PCR prime
C 574	12.4	17	1	ADB44348	Tumour suppression	647	12.2	0.6	17	1	ABN02042	Human GDMPLP-1 17-m
C 575	12.4	17	1	ADC70411	Primer oligo used	C 648	12.2	0.6	17	1	ABN00316	Human GDMPLP-1 17-m
C 576	12.4	17	1	ADC70430	Primer oligo used	C 649	12.2	0.6	17	1	ABN10596	Human GDMPLP-1 17-m
C 577	12.4	17	1	ADC70409	Primer oligo used	C 650	12.2	0.6	17	1	ABN06070	Human GDMPLP-1 17-m
C 578	12.4	17	1	ADB80969	Rabbit beta-globin	651	12.2	0.6	17	1	ABN08403	Human GDMPLP-1 17-m
C 579	12.4	17	1	ADB80970	Rabbit beta-globin	C 652	12.2	0.6	17	1	ABN01188	Human GDMPLP-1 17-m
C 580	12.4	17	1	ADB80968	Rabbit beta-globin	C 653	12.2	0.6	17	1	ABN02688	Human GDMPLP-1 17-m
C 581	12.4	17	1	ADB80967	Rabbit beta-globin	C 654	12.2	0.6	17	1	ABN08406	Human GDMPLP-1 17-m
C 582	12.4	17	1	ABK01807	Human NOGO Zinzyme	C 655	12.2	0.6	17	1	ABN02041	Human GDMPLP-1 17-m
C 583	12.4	17	1	ADE43557	Human IDE sequenci	C 656	12.2	0.6	17	1	ABK25912	Albino plant produ
C 584	12.2	17	1	ADA50406	Thermus scotoductu	C 657	12.2	0.6	17	1	ABK25911	Albino plant produ
C 585	12.2	17	1	ACQ79937	Thermus oshimai nu	C 658	12.2	0.6	17	1	ABK18988	Human HPL scannin
C 586	12.2	17	1	AAQ11387	Probe COD 931 spec	659	12.2	0.6	17	1	ABK17499	Human ERG DNazyme
C 587	12.2	17	1	AAQ11387	Antisense polyamin	C 660	12.2	0.6	17	1	ABK18610	Human ERG DNazyme
C 588	12.2	17	1	AAQ21838	Enzymatic RNA mole	661	12.2	0.6	17	1	ABK18625	Human ERG G-Cleave
C 589	12.2	17	1	AAQ57302	Mutant Ki-ras codo	662	12.2	0.6	17	1	ABK18986	Human ERG DNazyme
C 590	12.2	17	1	AAQ62032	Peptide nucleic ac	C 663	12.2	0.6	17	1	ABK18190	Human ERG DNazyme
C 591	12.2	17	1	AAQ01734	K-ras modulating s	C 664	12.2	0.6	17	1	ABK18580	Human ERG DNazyme
C 592	12.2	17	1	AAQ79851	Antisense RA-beta2	665	12.2	0.6	17	1	ABK18580	Human ERG G-Cleave
C 593	12.2	17	1	AAQ43101	Antisense RA-beta2	C 666	12.2	0.6	17	1	ABK18023	Human ERG DNazyme
C 594	12.2	17	1	AAQ12444	Antiviral phosphor	667	12.2	0.6	17	1	ABK18023	Human ERG DNazyme
C 595	12.2	17	1	AAQ93618	Primer 4 (reverse)	C 668	12.2	0.6	17	1	ABK18023	Human ERG DNazyme
C 596	12.2	17	1	AAQ74663	Mouse flk-1 VEGF r	669	12.2	0.6	17	1	ABK18023	Human ERG DNazyme
C 597	12.2	17	1	AAQ73174	Mouse flk-1 VEGF r	C 670	12.2	0.6	17	1	ABK18023	Human ERG DNazyme
C 598	12.2	17	1	AAQ93446	Probe specific for	671	12.2	0.6	17	1	ABK18023	Human ERG DNazyme
C 599	12.2	17	1	AAQ97640	Human EGF-R target	C 672	12.2	0.6	17	1	ABK18023	Human ERG DNazyme
C 600	12.2	17	1	AAQ29733	Probe used to exam	673	12.2	0.6	17	1	ABK18023	Human ERG DNazyme
C 601	12.2	17	1	AAQ14104	Nucleotide sequenc	C 674	12.2	0.6	17	1	ABK18023	Human ERG DNazyme
C 602	12.2	17	1	AAQ14134	Integrin alpha 6 s	675	12.2	0.6	17	1	ABK18023	Human ERG DNazyme
C 603	12.2	17	1	AAQ20940	Integrin subunit b	C 676	12.2	0.6	17	1	ABK18023	Human ERG DNazyme
C 604	12.2	17	1	AAQ22863	Aryl hydrocarbon n	677	12.2	0.6	17	1	ABK18023	Human ERG DNazyme
C 605	12.2	17	1	AAQ17212	Human TIE-2 substr	C 678	12.2	0.6	17	1	ABK18023	Human ERG DNazyme
C 606	12.2	17	1	AAQ18977	Human TIE-2 substr	679	12.2	0.6	17	1	ABK18023	Human ERG DNazyme
C 607	12.2	17	1	AAQ17180	Integrin alpha 6 s	C 680	12.2	0.6	17	1	ABK18023	Human ERG DNazyme
C 608	12.2	17	1	AAQ20389	Antisense oligonuc	681	12.2	0.6	17	1	ABK18023	Human ERG DNazyme
C 609	12.2	17	1	AAQ64031	Human Ki-ras speci	C 682	12.2	0.6	17	1	ABK18023	Human ERG DNazyme
C 610	12.2	17	1	AAQ21627	Ras gene modulatn	683	12.2	0.6	17	1	ABK18023	Human ERG DNazyme
C 611	12.2	17	1	AAQ56991	Human A-Raf substr	684	12.2	0.6	17	1	ABK18023	Human ERG DNazyme
C 612	12.2	17	1	AAQ52448	Human B-Raf substr	685	12.2	0.6	17	1	ABK18023	Human ERG DNazyme
C 613	12.2	17	1	AAQ93545	Triple helix third	686	12.2	0.6	17	1	ABK18023	Human ERG DNazyme
C 614	12.2	17	1	AAQ14709	Human tenascin bin	C 687	12.2	0.6	17	1	ABK18023	Human ERG DNazyme
C 615	12.2	17	1	AAQ77963	Human tenascin bin	C 688	12.2	0.6	17	1	ABK18023	Human ERG DNazyme
C 616	12.2	17	1	AAQ77925	Human tenascin bin	C 689	12.2	0.6	17	1	ABK18023	Human ERG DNazyme
C 617	12.2	17	1	AAQ77944	Human tenascin bin	690	12.2	0.6	17	1	ABK18023	Human ERG DNazyme

691	12.2	0.6	17	1	ADB05113	Human MDZ12 scanni	764	12	0.6	13	1	ABH43124	Oligonucleotide S
692	12.2	0.6	17	1	ADB04342	Human MDZ7 scanni	c 765	12	0.6	15	1	AAH65125	Mouse B7-1 hammer
c 693	12.2	0.6	17	1	ADB00275	Human MD23 scanni	766	12	0.6	15	1	AAH75700	Human flt-1 and K1
c 694	12.2	0.6	17	1	ADB04346	Human MD27 scanni	767	12	0.6	15	1	AAH65580	Immunosuppressant
c 695	12.2	0.6	17	1	ADB03496	Human MD27 scanni	c 768	12	0.6	15	1	AAH51932	Probe for P. aerug
c 696	12.2	0.6	17	1	ADA99631	Human MD23 scanni	769	12	0.6	15	1	AAF48241	IGFBP3 oligonucleo
c 697	12.2	0.6	17	1	ADB00193	Human MD24 scanni	770	12	0.6	15	1	AAF48238	IGFBP3 oligonucleo
c 698	12.2	0.6	17	1	ADA99615	Human MD23 scanni	771	12	0.6	15	1	AAF48239	IGFBP3 oligonucleo
c 699	12.2	0.6	17	1	ABZ64997	Human MD23 scanni	772	12	0.6	15	1	AAF48238	IGFBP3 oligonucleo
c 700	12.2	0.6	17	1	ABZ62152	Human HER2 DNzyme	773	12	0.6	15	1	AAH46570	EDG4 gene, allele
c 701	12.2	0.6	17	1	ABZ65474	Human HER2 DNzyme	774	12	0.6	15	1	ABL88305	Human CHRNE allele
c 702	12.2	0.6	17	1	ABZ60314	Human K-Ras DNzyme	c 775	12	0.6	15	1	ABK95664	Human SCYB6 gene p
c 703	12.2	0.6	17	1	ABZ65475	Human HER2 DNzyme	776	12	0.6	15	1	AAH96179	Human Acetylcholin
c 704	12.2	0.6	17	1	ACD60318	HCV DNzyme subtr	c 777	12	0.6	15	1	AAH99989	Human NPRI gene al
705	12.2	0.6	17	1	ACD55493	HBV ambezyme subs	c 778	12	0.6	15	1	ABL91842	Human LIPG gene al
c 706	12.2	0.6	17	1	ACD63867	HCV minus strand D	779	12	0.6	15	1	ABK54342	Human SCYA26 gene
c 707	12.2	0.6	17	1	ACD51051	HBV hammerhead rib	780	12	0.6	15	1	ABX01735	Hepatitis C virus
c 708	12.2	0.6	17	1	ACD61716	HCV minus strand D	c 781	12	0.6	15	1	AAH39492	CCBP2 detecting AS
c 709	12.2	0.6	17	1	ACD63372	HCV minus strand D	c 782	12	0.6	15	1	ACD66205	Anti-HCV nucleic a
c 710	12.2	0.6	17	1	ACD53015	HBV inozyme subtr	783	12	0.6	15	1	ACD66281	Mouse TNF-a hammer
c 711	12.2	0.6	17	1	ACC64699	Murine oligonucleo	c 784	12	0.6	15	1	AAH56226	HLA type analysis
c 712	12.2	0.6	17	1	ACC66686	Murine oligonucleo	785	12	0.6	17	1	AAQ42918	Human flt1 VEGF re
c 713	12.2	0.6	17	1	ACC68289	Murine oligonucleo	c 786	12	0.6	17	1	AAH68749	Human flt1 VEGF re
c 714	12.2	0.6	17	1	ACH00302	Forward primer use	787	12	0.6	17	1	AAH68750	Human flt1 VEGF re
c 715	12.2	0.6	17	1	ADB43899	Tumour suppression	c 788	12	0.6	17	1	AAH69219	Human flt1 VEGF re
c 716	12.2	0.6	17	1	ADB42956	Tumour suppression	c 789	12	0.6	17	1	AAH69221	Human flt1 VEGF re
c 717	12.2	0.6	17	1	ADB39715	Tumour suppression	790	12	0.6	17	1	AAH68751	Human flt1 VEGF re
c 718	12.2	0.6	17	1	ADC04003	Human Na/H exchange	c 791	12	0.6	17	1	AAH69220	Human flt1 VEGF re
c 719	12.2	0.6	17	1	ADC03563	Human Na/H exchange	c 792	12	0.6	17	1	AAV02357	Pseudo-nitzschia h
c 720	12.2	0.6	17	1	ADC04000	Human Na/H exchange	793	12	0.6	17	1	AAV02374	Pseudo-nitzschia h
c 721	12.2	0.6	17	1	ADC03564	Human Na/H exchange	c 794	12	0.6	17	1	AAH36131	PCR primer p1 used
c 722	12.2	0.6	17	1	ADB45316	Tumour suppression	795	12	0.6	17	1	AAH36131	Human genomic SNP
c 723	12.2	0.6	17	1	ADB40364	Tumour suppression	c 796	12	0.6	17	1	AAH36131	Human genomic SNP
724	12.2	0.6	18	1	ADT051120	TNFR1 expression m	797	12	0.6	17	1	AAH02850	Hammerhead ribozym
725	12.2	0.6	20	1	ABT051119	TNFR1 expression m	798	12	0.6	17	1	ADH00751	Human NOD1 inozyme
726	12.2	0.6	20	1	ABK30573	Human glioma-assoc	799	12	0.6	17	1	ADA43411	Human asthma assoc
c 727	12	0.6	12	1	ABH72006	Oligonucleotide pr	800	12	0.6	17	1	ABN000312	Human GMPLP-1 17-m
c 728	12	0.6	12	1	ABH77091	Oligonucleotide pr	801	12	0.6	17	1	ABN000315	Human GMPLP-1 17-m
c 729	12	0.6	12	1	ABH77091	Oligonucleotide pr	802	12	0.6	17	1	ABN000314	Human GMPLP-1 17-m
c 730	12	0.6	12	1	ABH77091	Oligonucleotide pr	803	12	0.6	17	1	ABN000311	Human GMPLP-1 17-m
c 731	12	0.6	12	1	ABH77091	Oligonucleotide pr	804	12	0.6	17	1	ABN000313	Human GMPLP-1 17-m
c 732	12	0.6	12	1	ABH77091	Oligonucleotide pr	c 805	12	0.6	17	1	AAH98975	Human asthma assoc
c 733	12	0.6	12	1	ABH77091	Oligonucleotide pr	806	12	0.6	17	1	AAH22095	Human SNP2-C allele
c 734	12	0.6	13	1	ABH81939	Oligonucleotide SE	807	12	0.6	17	1	ABK18245	Human ERG hammerhe
735	12	0.6	13	1	ABH81939	Oligonucleotide SE	808	12	0.6	17	1	ABK18245	Human ERG hammerhe
736	12	0.6	13	1	ABH81939	Oligonucleotide SE	c 809	12	0.6	17	1	ABK18247	Human ERG hammerhe
737	12	0.6	13	1	ABH81939	Oligonucleotide SE	810	12	0.6	17	1	ABK18247	Human ERG hammerhe
c 738	12	0.6	13	1	ABH81939	Oligonucleotide SE	c 811	12	0.6	17	1	ABK18247	Human ERG hammerhe
c 739	12	0.6	13	1	ABH81939	Oligonucleotide SE	812	12	0.6	17	1	ABK18247	Human ERG hammerhe
c 740	12	0.6	13	1	ABH81939	Oligonucleotide SE	c 813	12	0.6	17	1	ABK18247	Human ERG hammerhe
c 741	12	0.6	13	1	ABH81939	Oligonucleotide SE	814	12	0.6	17	1	ABK18247	Human ERG hammerhe
c 742	12	0.6	13	1	ABH81939	Oligonucleotide SE	c 815	12	0.6	17	1	ABK18247	Human ERG hammerhe
c 743	12	0.6	13	1	ABH81939	Oligonucleotide SE	816	12	0.6	17	1	ABK18247	Human ERG hammerhe
c 744	12	0.6	13	1	ABH81939	Oligonucleotide SE	c 817	12	0.6	17	1	ABK18247	Human ERG hammerhe
c 745	12	0.6	13	1	ABH81939	Oligonucleotide SE	818	12	0.6	17	1	ABK18247	Human ERG hammerhe
c 746	12	0.6	13	1	ABH81939	Oligonucleotide SE	c 819	12	0.6	17	1	ABK18247	Human ERG hammerhe
c 747	12	0.6	13	1	ABH81939	Oligonucleotide SE	820	12	0.6	17	1	ABK18247	Human ERG hammerhe
c 748	12	0.6	13	1	ABH81939	Oligonucleotide SE	c 821	12	0.6	17	1	ABK18247	Human ERG hammerhe
c 749	12	0.6	13	1	ABH81939	Oligonucleotide SE	822	12	0.6	17	1	ABK18247	Human ERG hammerhe
c 750	12	0.6	13	1	ABH81939	Oligonucleotide SE	c 823	12	0.6	17	1	ABK18247	Human ERG hammerhe
751	12	0.6	13	1	ABH81939	Oligonucleotide SE	824	12	0.6	17	1	ABK18247	Human ERG hammerhe
752	12	0.6	13	1	ABH81939	Oligonucleotide SE	c 825	11.8	0.5	14	1	AAQ29547	Mouse relA hammer
753	12	0.6	13	1	ABH81939	Oligonucleotide SE	826	11.8	0.5	15	1	AAQ29547	Mouse relA hammer
c 754	12	0.6	13	1	ABH81939	Oligonucleotide SE	c 827	11.8	0.5	15	1	AAQ29547	Mouse relA hammer
c 755	12	0.6	13	1	ABH81939	Oligonucleotide SE	828	11.8	0.5	15	1	AAQ29547	Mouse relA hammer
756	12	0.6	13	1	ABH81939	Oligonucleotide SE	c 829	11.8	0.5	15	1	AAQ29547	Mouse relA hammer
c 757	12	0.6	13	1	ABH81939	Oligonucleotide SE	830	11.8	0.5	15	1	AAQ29547	Mouse relA hammer
c 758	12	0.6	13	1	ABH81939	Oligonucleotide SE	831	11.8	0.5	15	1	AAQ29547	Mouse relA hammer
c 759	12	0.6	13	1	ABH81939	Oligonucleotide SE	c 832	11.8	0.5	15	1	AAQ29547	Mouse relA hammer
c 760	12	0.6	13	1	ABH81939	Oligonucleotide SE	833	11.8	0.5	15	1	AAQ29547	Mouse relA hammer
761	12	0.6	13	1	ABH81939	Oligonucleotide SE	c 834	11.8	0.5	15	1	AAQ29547	Mouse relA hammer
c 762	12	0.6	13	1	ABH81939	Oligonucleotide SE	c 835	11.8	0.5	15	1	AAQ29547	Mouse relA hammer
c 763	12	0.6	13	1	ABH81939	Oligonucleotide SE	836	11.8	0.5	15	1	AAQ29547	Mouse relA hammer

C 837	11.8	0.5	15	1	AAV99282	HIV homology regio	910	11.6	0.5	13	1	ABC32187	Oligonucleotide SE
C 838	11.8	0.5	15	1	AA262704	Substrate for HH r	C 911	11.6	0.5	13	1	ABC32186	Oligonucleotide SE
C 839	11.8	0.5	15	1	AA264105	Substrate for ham	912	11.6	0.5	15	1	AA319718	ASO probe #15 to d
C 840	11.8	0.5	15	1	AA262498	Substrate for HH r	913	11.6	0.5	18	1	AA37653	PCR primer PFX52U
C 841	11.8	0.5	15	1	AA264020	Substrate for ham	914	11.6	0.5	20	1	AA160009	Human GH-1 gene am
C 842	11.8	0.5	15	1	AA290983	Human NR8 gene pro	C 915	11.6	0.5	20	1	ABK89166	Human JAZF1 PCR pr
C 843	11.8	0.5	15	1	AA290861	Human NR8 gene pro	916	11.6	0.5	21	1	AAT94017	Primer for TPO/hCG
C 844	11.8	0.5	15	1	AA259282	Human NR8 gene pro	C 917	11.6	0.5	24	1	AAV55817	Multimerisation of
C 845	11.8	0.5	15	1	AA259278	Human NR8 gene pro	918	11.6	0.5	29	1	AAZ09169	Human 55kDa tumour
C 846	11.8	0.5	15	1	AA290837	Human NR8 gene pro	919	11.6	0.5	29	1	AAZ48858	Human 55 KD TNFBP
C 847	11.8	0.5	15	1	AA290836	Human NR8 gene pro	920	11.4	0.5	13	1	AAH52203	Neuroblastoma spec
C 848	11.8	0.5	15	1	AA290895	Human NR8 gene pro	921	11.4	0.5	13	1	AA515921	Human telomerase p
C 850	11.8	0.5	15	1	AA715117	Neocarcinostatina	C 922	11.4	0.5	13	1	AA806683	Immunogenic CoG ol
C 851	11.8	0.5	15	1	AA63356	C-1027 gene cluste	C 923	11.4	0.5	13	1	ABC25843	Oligonucleotide SE
C 852	11.8	0.5	15	1	AA24639	Primer for a polym	924	11.4	0.5	13	1	ABC79822	Oligonucleotide SE
C 853	11.8	0.5	15	1	AAE52635	IGF-I oligonucleot	925	11.4	0.5	13	1	ABC05559	Oligonucleotide SE
C 854	11.8	0.5	15	1	AAE50568	IGF-I oligonucleot	C 926	11.4	0.5	13	1	ABC81714	Oligonucleotide SE
C 855	11.8	0.5	15	1	AAE53971	IGF-I oligonucleot	C 927	11.4	0.5	13	1	ABF46128	Oligonucleotide SE
C 856	11.8	0.5	15	1	AAE49377	IGF-I oligonucleot	C 928	11.4	0.5	13	1	ABH07889	Oligonucleotide SE
C 857	11.8	0.5	15	1	AAE46517	IGFBP2 oligonucleo	929	11.4	0.5	13	1	ABH14303	Oligonucleotide SE
C 858	11.8	0.5	15	1	AAE46761	IGFBP3 oligonucleo	930	11.4	0.5	13	1	ABC46382	Oligonucleotide SE
C 859	11.8	0.5	15	1	AAE49378	IGF-I oligonucleot	C 931	11.4	0.5	13	1	ABC35597	Oligonucleotide SE
C 860	11.8	0.5	15	1	AAE50793	IGF-I oligonucleot	C 932	11.4	0.5	13	1	ABC36045	Oligonucleotide SE
C 861	11.8	0.5	15	1	AAE46786	IGFBP3 oligonucleo	933	11.4	0.5	13	1	ABC60876	Oligonucleotide SE
C 862	11.8	0.5	15	1	AAE50569	IGF-I oligonucleot	934	11.4	0.5	13	1	ABF32398	Oligonucleotide SE
C 863	11.8	0.5	15	1	AAE50570	IGF-I oligonucleot	935	11.4	0.5	13	1	ABF36149	Oligonucleotide SE
C 864	11.8	0.5	15	1	AAE46785	IGFBP3 oligonucleo	C 936	11.4	0.5	13	1	ABF33887	Oligonucleotide SE
C 865	11.8	0.5	15	1	AAE47506	IGFBP3 oligonucleo	C 937	11.4	0.5	13	1	ABF89343	Oligonucleotide SE
C 866	11.8	0.5	15	1	AAE47507	IGFBP3 oligonucleo	C 938	11.4	0.5	13	1	ABH49472	Oligonucleotide SE
C 867	11.8	0.5	15	1	AAE46757	IGFBP3 oligonucleo	C 939	11.4	0.5	13	1	ABC05558	Oligonucleotide SE
C 868	11.8	0.5	15	1	AAE52178	IGF-I oligonucleot	940	11.4	0.5	13	1	ABF25379	Oligonucleotide SE
C 869	11.8	0.5	15	1	AAH28859	Human interleukin-	941	11.4	0.5	13	1	ABF33003	Oligonucleotide SE
C 870	11.8	0.5	15	1	AAE70302	Human DRD2 allele	942	11.4	0.5	13	1	ABF46116	Oligonucleotide SE
C 871	11.8	0.5	15	1	AAE69371	Human IL4Ralpha ge	943	11.4	0.5	13	1	ABF56566	Oligonucleotide SE
C 872	11.8	0.5	15	1	AAE69501	Human IL4Ralpha ge	944	11.4	0.5	13	1	ABC54454	Oligonucleotide SE
C 873	11.8	0.5	15	1	AA033621	Human API-112 pref	C 945	11.4	0.5	13	1	ABC79823	Oligonucleotide SE
C 874	11.8	0.5	15	1	AA044700	Human bcl-2 antise	C 946	11.4	0.5	13	1	ABF23790	Oligonucleotide SE
C 875	11.8	0.5	15	1	AA395428	Human ICAM2 haplot	C 947	11.4	0.5	13	1	ABF25378	Oligonucleotide SE
C 876	11.8	0.5	15	1	AB234231	HIV-1 reverse tran	C 948	11.4	0.5	13	1	ABF5937	Oligonucleotide SE
C 877	11.8	0.5	15	1	AB234639	HIV-1 reverse tran	949	11.4	0.5	13	1	ABH5264	Oligonucleotide SE
C 878	11.8	0.5	15	1	ABX32144	Human colon cancer	C 950	11.4	0.5	13	1	ABH15265	Oligonucleotide SE
C 879	11.8	0.5	15	1	ABX01158	Hepatitis C virus	951	11.4	0.5	13	1	ABC25842	Oligonucleotide SE
C 880	11.8	0.5	15	1	ABX00555	Hepatitis C virus	952	11.4	0.5	13	1	ABC36044	Oligonucleotide SE
C 881	11.8	0.5	15	1	ABX01073	Hepatitis C virus	953	11.4	0.5	13	1	ABC64518	Oligonucleotide SE
C 882	11.8	0.5	15	1	ABX00349	Hepatitis C virus	954	11.4	0.5	13	1	ABF35936	Oligonucleotide SE
C 883	11.8	0.5	15	1	ACC47781	Hepatitis C virus	C 955	11.4	0.5	13	1	ABF36148	Oligonucleotide SE
C 884	11.8	0.5	15	1	ABV93739	Bacillus thuringie	C 956	11.4	0.5	13	1	ABF43694	Oligonucleotide SE
C 885	11.8	0.5	15	1	ACC71571	Alzheimer's Disease	C 957	11.4	0.5	13	1	ABF95985	Oligonucleotide SE
C 886	11.8	0.5	15	1	ABX50038	Telomere length an	C 958	11.4	0.5	13	1	ABF56567	Oligonucleotide SE
C 887	11.8	0.5	15	1	ABX50040	Telomere length an	959	11.4	0.5	13	1	ABH07888	Oligonucleotide SE
C 888	11.8	0.5	16	1	ADD14900	Kras target oligon	C 960	11.4	0.5	13	1	ABH64846	Oligonucleotide SE
C 889	11.8	0.5	16	1	AAQ70682	Triplex forming ol	C 961	11.4	0.5	13	1	ABC37656	Oligonucleotide SE
C 890	11.8	0.5	16	1	AAQ701926	P.cepacia 16S rRNA	C 962	11.4	0.5	13	1	ABF68290	Oligonucleotide SE
C 891	11.8	0.5	16	1	AAQ701934	P.cepacia 16S rRNA	963	11.4	0.5	13	1	ABF46129	Oligonucleotide SE
C 892	11.8	0.5	16	1	AAV08593	Primer ACE/108RB f	964	11.4	0.5	13	1	ABH59544	Oligonucleotide SE
C 893	11.8	0.5	16	1	AA983385	PTEN/MMAC1 5'UTR-E	965	11.4	0.5	13	1	ABC93462	Oligonucleotide SE
C 894	11.8	0.5	16	1	AA986651	PTEN/MMAC1 DNA PCR	966	11.4	0.5	13	1	ABF11606	Oligonucleotide SE
C 895	11.8	0.5	16	1	AA382809	Human angiotensin-	C 967	11.4	0.5	13	1	ABC40096	Oligonucleotide SE
C 896	11.8	0.5	16	1	AAE66972	Human leukocyte an	968	11.4	0.5	13	1	ABF16418	Oligonucleotide SE
C 897	11.8	0.5	16	1	AAE61209	Human ACE, AGT and	C 969	11.4	0.5	13	1	ABF32399	Oligonucleotide SE
C 898	11.8	0.5	16	1	AA166199	Peptide nucleic ac	C 970	11.4	0.5	13	1	ABH59545	Oligonucleotide SE
C 899	11.8	0.5	16	1	AA315504	N-acetyltransferas	971	11.4	0.5	13	1	ABC40097	Oligonucleotide SE
C 900	11.8	0.5	16	1	ABT14523	Rhesus monkey P-gl	972	11.4	0.5	13	1	ABF72586	Oligonucleotide SE
C 901	11.8	0.5	16	1	ABX75231	Human 216 gene all	C 973	11.4	0.5	13	1	ABH14302	Oligonucleotide SE
C 902	11.8	0.5	16	1	AD070218	Zoster virus Irf-1	C 974	11.4	0.5	13	1	ABH65694	Oligonucleotide SE
C 903	11.8	0.5	17	1	AD543627	Human KNSL1 PCR pr	975	11.4	0.5	13	1	ABC20177	Oligonucleotide SE
C 904	11.8	0.5	17	1	AD543905	Tumour suppression	976	11.4	0.5	13	1	ABC70938	Oligonucleotide SE
C 905	11.8	0.5	17	1	ABN08363	Human GDMPLP-1 17-m	C 977	11.4	0.5	13	1	ABC22060	Oligonucleotide SE
C 906	11.8	0.5	17	1	AD304343	Human MDZ7 scannin	C 978	11.4	0.5	13	1	ABF11607	Oligonucleotide SE
C 907	11.8	0.5	17	1	ABT35836	Tumour suppression	C 979	11.4	0.5	13	1	ABC64519	Oligonucleotide SE
C 908	11.8	0.5	19	1	AAV10706	Human breast cance	980	11.4	0.5	13	1	ABH36193	Oligonucleotide SE
C 909	11.6	0.5	13	1	ABF31853	Oligonucleotide SE	981	11.4	0.5	13	1	ABF89342	Oligonucleotide SE
C 909	11.6	0.5	13	1	ABF31852	Oligonucleotide SE	982	11.4	0.5	13	1	ABC81715	Oligonucleotide SE

1	ABF12076	13	0.5	11.4	1056	11.4	0.5	15	1	AAT55043	Oligonucleotide SE	Human reIA hammer
2	ABF15729	13	0.5	11.4	1057	11.4	0.5	15	1	AAT51874	Oligonucleotide SE	Human ICAM hammer
3	ABF13356	13	0.5	11.4	1058	11.4	0.5	15	1	AAT37613	Oligonucleotide SE	Apo (a) mRNA (nt . p
4	ABF33002	13	0.5	11.4	1059	11.4	0.5	15	1	AAT37615	Oligonucleotide SE	Apo (a) mRNA (nt . p
5	ABF94304	13	0.5	11.4	1060	11.4	0.5	15	1	AAT64525	Oligonucleotide SE	Human B7-1 hammer
6	ABH07886	13	0.5	11.4	1061	11.4	0.5	15	1	AAT35030	Oligonucleotide SE	Triplex-forming oli
7	ABH49473	13	0.5	11.4	1062	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
8	ABG46383	13	0.5	11.4	1063	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
9	ABG60877	13	0.5	11.4	1064	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
10	ABF12077	13	0.5	11.4	1065	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
11	ABF37657	13	0.5	11.4	1066	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
12	ABF15307	13	0.5	11.4	1067	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
13	ABF95984	13	0.5	11.4	1068	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
14	ABH04058	13	0.5	11.4	1069	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
15	ABF83676	13	0.5	11.4	1070	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
16	ABF31357	13	0.5	11.4	1071	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
17	ABF36152	13	0.5	11.4	1072	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
18	ABF72587	13	0.5	11.4	1073	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
19	ABH04058	13	0.5	11.4	1074	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
20	ABH43552	13	0.5	11.4	1075	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
21	ABH43553	13	0.5	11.4	1076	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
22	ABG22064	13	0.5	11.4	1077	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
23	ABG22065	13	0.5	11.4	1078	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
24	ABG35596	13	0.5	11.4	1079	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
25	ABF15728	13	0.5	11.4	1080	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
26	ABF31848	13	0.5	11.4	1081	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
27	ABF46117	13	0.5	11.4	1082	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
28	ABF63886	13	0.5	11.4	1083	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
29	ABG68985	13	0.5	11.4	1084	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
30	ABG70939	13	0.5	11.4	1085	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
31	ABF16419	13	0.5	11.4	1086	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
32	ABF31849	13	0.5	11.4	1087	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
33	ABF68286	13	0.5	11.4	1088	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
34	ABF94305	13	0.5	11.4	1089	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
35	ABG68984	13	0.5	11.4	1090	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
36	ABG22061	13	0.5	11.4	1091	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
37	ABG34844	13	0.5	11.4	1092	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
38	ABG64272	13	0.5	11.4	1093	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
39	ABF15306	13	0.5	11.4	1094	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
40	ABF68287	13	0.5	11.4	1095	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
41	ABF68291	13	0.5	11.4	1096	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
42	ABF73358	13	0.5	11.4	1097	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
43	ABH65695	13	0.5	11.4	1098	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
44	ABG3463	13	0.5	11.4	1099	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
45	ABG20176	13	0.5	11.4	1100	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
46	ABG54455	13	0.5	11.4	1101	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
47	ABG34845	13	0.5	11.4	1102	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
48	ABG64273	13	0.5	11.4	1103	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
49	ABF23791	13	0.5	11.4	1104	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
50	ABF36153	13	0.5	11.4	1105	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
51	ABF43695	13	0.5	11.4	1106	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
52	ABF73359	13	0.5	11.4	1107	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
53	ABH83677	13	0.5	11.4	1108	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
54	ABH36192	13	0.5	11.4	1109	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
55	ABH64847	13	0.5	11.4	1110	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
56	AAQ61996	14	0.5	11.4	1111	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
57	AAQ61915	14	0.5	11.4	1112	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
58	AAQ61899	14	0.5	11.4	1113	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
59	AAQ78453	14	0.5	11.4	1114	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
60	AAQ97984	14	0.5	11.4	1115	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
61	AAQ67549	14	0.5	11.4	1116	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
62	AAQ67550	14	0.5	11.4	1117	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
63	AAA19201	14	0.5	11.4	1118	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
64	AAQ06769	14	0.5	11.4	1119	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
65	AAQ66742	14	0.5	11.4	1120	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
66	ADB68047	14	0.5	11.4	1121	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
67	ADB14064	14	0.5	11.4	1122	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
68	AAV65725	14	0.5	11.4	1123	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
69	AAZ65471	14	0.5	11.4	1124	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
70	AAQ42793	15	0.5	11.4	1125	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
71	AAQ42796	15	0.5	11.4	1126	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
72	AAQ42796	15	0.5	11.4	1127	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib
73	AAQ42796	15	0.5	11.4	1128	11.4	0.5	15	1	AAT50145	Oligonucleotide SE	Rabbit CTFP HH rib

1129	11.4	0.5	15	1	AAF52691	IGF-I oligonucleot	c1202	11	0.5	11	1	ABV69560	Human skin EST 734
1130	11.4	0.5	16	1	AAQ42798	Pseudonucleotide c	c1203	11	0.5	11	1	ABV63136	Human skin EST 922
1131	11.4	0.5	16	1	AAQ72441	Ligase Chain React	1204	11	0.5	11	1	ABV68292	Human skin EST 607
1132	11.4	0.5	16	1	AAV64483	Human haemopoietin	1205	11	0.5	12	1	AAV72000	Oligo used for con
1133	11.4	0.5	16	1	AAV64472	Human haemopoietin	1206	11	0.5	12	1	AAO06763	VEGF derived short
1134	11.4	0.5	16	1	AAV11898	L. lactis NS3 locu	1207	11	0.5	12	1	AAO04023	5' end of coding r
1135	11.4	0.5	16	1	AAV56201	Human alpha-7 nico	c1208	11	0.5	12	1	AAH46047	Synthetic oligonuc
1136	11.4	0.5	16	1	AAH6561	PCNA hairpin riboz	c1209	11	0.5	12	1	ABT27667	Oligonucleotide pr
1137	11.4	0.5	16	1	AAH61727	PCNA hairpin/hamme	1210	11	0.5	12	1	ABH91814	Oligonucleotide pr
1138	11.4	0.5	16	1	AAH88161	Human thyroid malf	1211	11	0.5	12	1	ABH45561	Oligonucleotide pr
1139	11.4	0.5	16	1	ABT33712	Ribozyme substrate	c1212	11	0.5	12	1	ABH75494	Oligonucleotide pr
1140	11.4	0.5	16	1	ABT33711	Ribozyme substrate	1213	11	0.5	12	1	ABH08662	Oligonucleotide pr
1141	11.4	0.5	16	1	ADE14063	Optineurin promote	c1214	11	0.5	12	1	ABH91084	Oligonucleotide pr
1142	11.4	0.5	16	1	ADE14267	Optineurin promote	1215	11	0.5	12	1	ABH91084	Oligonucleotide pr
1143	11.4	0.5	17	1	ABK02378	Human NOGO Amberzy	c1216	11	0.5	12	1	ABH76801	Oligonucleotide pr
1144	11.4	0.5	20	1	ABV58392	Human PDE7a3 splic	c1217	11	0.5	12	1	ABH17147	Oligonucleotide pr
1145	11.4	0.5	28	1	AD681712	Antisense PCR prim	1218	11	0.5	12	1	ABH80412	Oligonucleotide pr
1146	11.2	0.5	16	1	AAV08583	Primer ACE/108RB f	1219	11	0.5	12	1	ABH20963	Oligonucleotide pr
1147	11.2	0.5	16	1	AAH38209	Human angiotensin-	1220	11	0.5	12	1	ABH71304	Oligonucleotide pr
1148	11.2	0.5	16	1	AAH38209	Human ACE, AGT and	c1221	11	0.5	12	1	ABH48732	Oligonucleotide pr
1149	11.2	0.5	16	1	AAQ24931	Homo box consensu	1222	11	0.5	12	1	ABH72529	Oligonucleotide pr
1150	11.2	0.5	16	1	AAQ24931	Homo box consensu	c1223	11	0.5	12	1	ABH72529	Oligonucleotide pr
1151	11.2	0.5	16	1	AAQ30514	Immunoglobulin gen	1224	11	0.5	12	1	ABH61761	Oligonucleotide pr
1152	11.2	0.5	16	1	AAQ21918	TEG-terminatd exo	c1225	11	0.5	12	1	ABH63498	Oligonucleotide pr
1153	11.2	0.5	16	1	AAQ92129	p53 detection prob	1226	11	0.5	12	1	ABH93417	Oligonucleotide pr
1154	11.2	0.5	16	1	AAH22506	Streptomyces sp. o	c1227	11	0.5	12	1	ABH97627	Oligonucleotide pr
1155	11.2	0.5	16	1	AAH38471	Ancyllostoma secret	1228	11	0.5	12	1	ABH51405	Oligonucleotide pr
1156	11.2	0.5	16	1	AAH37119	Oligonucleotide co	c1229	11	0.5	12	1	ABH76762	Oligonucleotide pr
1157	11.2	0.5	16	1	AAV41113	Probe HBPr9 for pr	c1230	11	0.5	12	1	ABH71629	Oligonucleotide pr
1158	11.2	0.5	16	1	AAV49052	rb gene antisense	1231	11	0.5	12	1	ABH26765	Oligonucleotide pr
1159	11.2	0.5	16	1	AAH04899	Tenascin-C phospho	c1232	11	0.5	12	1	ABH44106	Oligonucleotide pr
1160	11.2	0.5	16	1	AAH259366	Reverse PCR primer	c1233	11	0.5	12	1	ABH98002	Oligonucleotide pr
1161	11.2	0.5	16	1	AAH40694	Human CD36 polymor	1234	11	0.5	12	1	ABH75143	Oligonucleotide pr
1162	11.2	0.5	16	1	AAH290068	Oligonucleotide #2	1235	11	0.5	12	1	ABH80295	Oligonucleotide pr
1163	11.2	0.5	16	1	AAH63783	Human TNFalpha gen	1236	11	0.5	12	1	ABH57944	Oligonucleotide pr
1164	11.2	0.5	16	1	AAH22297	Cathepsin B revers	c1237	11	0.5	12	1	ABH60879	Oligonucleotide pr
1165	11.2	0.5	16	1	AAH56862	Validation ribozym	c1238	11	0.5	12	1	ABH20629	Oligonucleotide pr
1166	11.2	0.5	16	1	AAH64977	Human Creml prote	1239	11	0.5	12	1	ABH06321	Oligonucleotide pr
1167	11.2	0.5	16	1	ABK33881	Gag/pol expression	c1240	11	0.5	12	1	ABH14479	Oligonucleotide pr
1168	11.2	0.5	16	1	ABK49297	Norwalk-like virus	c1241	11	0.5	12	1	ABH74944	Oligonucleotide pr
1169	11.2	0.5	16	1	ABH42982	Human chromosome 1	1242	11	0.5	12	1	ABH45550	Oligonucleotide pr
1170	11.2	0.5	16	1	ABH44648	Human chromosome 1	1243	11	0.5	12	1	ABH79229	Oligonucleotide pr
1171	11.2	0.5	16	1	ABH33335	Proliferation pote	1244	11	0.5	12	1	ABH20399	Oligonucleotide pr
1172	11.2	0.5	16	1	ABH94677	Human VRI antisens	c1245	11	0.5	12	1	ABH29214	Oligonucleotide pr
1173	11.2	0.5	16	1	AAH47118	Pyrim domain conta	c1246	11	0.5	12	1	ABH07454	Oligonucleotide pr
1174	11.2	0.5	16	1	ABH13524	Liver regeneration	c1247	11	0.5	12	1	ABH31075	Oligonucleotide pr
1175	11.2	0.5	16	1	ABH13524	Liver regeneration	1248	11	0.5	12	1	ABH08661	Oligonucleotide pr
1176	11.2	0.5	16	1	ADH07159	HSV-1 (17+) IRF-1	1249	11	0.5	12	1	ABH29724	Oligonucleotide pr
1177	11.2	0.5	17	1	ABH01806	Human NOGO Zinzyme	c1250	11	0.5	12	1	ABH154550	Oligonucleotide pr
1178	11.2	0.5	17	1	ABH04344	Human MDZ7 scannin	c1251	11	0.5	12	1	ABH18638	PCR primer (dnt3g3)
1179	11.2	0.5	17	1	ABH260690	Human K-Ras DNazym	c1252	11	0.5	13	1	ABC23644	Oligonucleotide SE
1180	11.2	0.5	17	1	ACA08321	Necrosis factor ka	1253	11	0.5	13	1	ABH16913	Oligonucleotide SE
1181	11.2	0.5	17	1	ABH34365	Tumour suppression	1254	11	0.5	13	1	ABH24106	Oligonucleotide SE
1182	11.2	0.5	17	1	ABH62152	Human H-Ras DNazym	c1255	11	0.5	13	1	ABH24107	Oligonucleotide SE
1183	11.2	0.5	18	1	AAH48840	Human TNFR1 mRNA 1	1256	11	0.5	13	1	ABH24107	Oligonucleotide SE
1184	11.2	0.5	18	1	ABH05081	TNFR1 expression m	c1257	11	0.5	13	1	ABH19490	Oligonucleotide SE
1185	11.2	0.5	18	1	ABH05082	TNFR1 expression m	1258	11	0.5	13	1	ABH96108	Oligonucleotide SE
1186	11.2	0.5	18	1	ABH05036	TNFR1 expression m	c1259	11	0.5	13	1	ABH96109	Oligonucleotide SE
1187	11.2	0.5	18	1	AAH41037	Cellular inhibitor	1260	11	0.5	13	1	ABH27699	Oligonucleotide SE
1188	11.2	0.5	18	1	AAH22131	Human c-IAP-2 mRNA	1261	11	0.5	13	1	ABH78022	Oligonucleotide SE
1189	11.2	0.5	18	1	AAH60507	Human c-IAP-2 anti	1262	11	0.5	13	1	ABH78022	Oligonucleotide SE
1190	11.2	0.5	19	1	AAH85941	Cdc 25 hs ribozyme	1263	11	0.5	13	1	ABC73245	Oligonucleotide SE
1191	11.2	0.5	19	1	AAH61103	Cdc25 hs ribozyme	1264	11	0.5	13	1	ABC11715	Oligonucleotide SE
1192	11.2	0.5	20	1	ABH86953	Human NOV7 forward	c1265	11	0.5	13	1	ABH71907	Oligonucleotide SE
1193	11.2	0.5	20	1	AAH19995	Human uncoupling p	c1266	11	0.5	13	1	ABH97143	Oligonucleotide SE
1194	11.2	0.5	21	1	AAH49614	Tumour differentia	c1267	11	0.5	13	1	ABH31071	Oligonucleotide SE
1195	11.2	0.5	24	1	AAH55819	Multimerisation of	1268	11	0.5	13	1	ABH84806	Oligonucleotide SE
1196	11.2	0.5	24	1	AAH39967	Minimal motif codi	1269	11	0.5	13	1	ABH60965	Oligonucleotide SE
1197	11	0.5	11	1	ABH087547	Human skin stress/	1270	11	0.5	13	1	ABH90460	Oligonucleotide SE
1198	11	0.5	11	1	ABH62854	Human skin EST 640	1271	11	0.5	13	1	ABH16022	Oligonucleotide SE
1199	11	0.5	11	1	ABH70557	Human skin EST 834	1272	11	0.5	13	1	ABH46709	Oligonucleotide SE
1200	11	0.5	11	1	ABH64863	Human skin EST 264	1273	11	0.5	13	1	ABH74713	Oligonucleotide SE
1201	11	0.5	11	1	ABH70275	Human skin EST 806	c1274	11	0.5	13	1	ABH14797	Oligonucleotide SE



1275	11	0.5	13	1	ABF86800	oligonucleotide SE	1348	11	0.5	13	1	ABF00871	oligonucleotide SE
1276	11	0.5	13	1	ABH12113	oligonucleotide SE	1349	11	0.5	13	1	ABF02653	oligonucleotide SE
1277	11	0.5	13	1	ABC72593	oligonucleotide SE	1350	11	0.5	13	1	ABC52788	oligonucleotide SE
1278	11	0.5	13	1	ABF02652	oligonucleotide SE	c1351	11	0.5	13	1	ABC82812	oligonucleotide SE
1279	11	0.5	13	1	ABC62370	oligonucleotide SE	1352	11	0.5	13	1	ABF10333	oligonucleotide SE
1280	11	0.5	13	1	ABCI14796	oligonucleotide SE	c1353	11	0.5	13	1	ABC11714	oligonucleotide SE
1281	11	0.5	13	1	ABC91351	oligonucleotide SE	c1354	11	0.5	13	1	ABC93441	oligonucleotide SE
1282	11	0.5	13	1	ABC66996	oligonucleotide SE	1355	11	0.5	13	1	ABC98399	oligonucleotide SE
1283	11	0.5	13	1	ABH19491	oligonucleotide SE	1356	11	0.5	13	1	ABC50569	oligonucleotide SE
1284	11	0.5	13	1	ABF84807	oligonucleotide SE	1357	11	0.5	13	1	ABC81717	oligonucleotide SE
1285	11	0.5	13	1	ABC72133	oligonucleotide SE	c1358	11	0.5	13	1	ABF16443	oligonucleotide SE
1286	11	0.5	13	1	ABF10332	oligonucleotide SE	1359	11	0.5	13	1	ABF27287	oligonucleotide SE
1287	11	0.5	13	1	ABC39943	oligonucleotide SE	1360	11	0.5	13	1	ABH19228	oligonucleotide SE
1288	11	0.5	13	1	ABF17947	oligonucleotide SE	1361	11	0.5	13	1	ABH34843	oligonucleotide SE
1289	11	0.5	13	1	ABF26372	oligonucleotide SE	c1362	11	0.5	13	1	ABF60964	oligonucleotide SE
1290	11	0.5	13	1	ABF71906	oligonucleotide SE	c1363	11	0.5	13	1	ABH57382	oligonucleotide SE
1291	11	0.5	13	1	ABF73362	oligonucleotide SE	1364	11	0.5	13	1	ABH63487	oligonucleotide SE
1292	11	0.5	13	1	ABF73363	oligonucleotide SE	c1365	11	0.5	13	1	ABC42501	oligonucleotide SE
1293	11	0.5	13	1	ABH34842	oligonucleotide SE	c1366	11	0.5	13	1	ABC46708	oligonucleotide SE
1294	11	0.5	13	1	ABH57383	oligonucleotide SE	c1367	11	0.5	13	1	ABC72132	oligonucleotide SE
1295	11	0.5	13	1	ABF02654	oligonucleotide SE	c1368	11	0.5	13	1	ABC98398	oligonucleotide SE
1296	11	0.5	13	1	ABF16912	oligonucleotide SE	1369	11	0.5	13	1	ABC99912	oligonucleotide SE
1297	11	0.5	13	1	ABF27286	oligonucleotide SE	c1370	11	0.5	13	1	ABC81716	oligonucleotide SE
1298	11	0.5	13	1	ABF95533	oligonucleotide SE	1371	11	0.5	13	1	ABC82813	oligonucleotide SE
1299	11	0.5	13	1	ABH25888	oligonucleotide SE	1372	11	0.5	13	1	ABF97142	oligonucleotide SE
1300	11	0.5	13	1	ABF77164	oligonucleotide SE	1373	11	0.5	13	1	ABF48208	oligonucleotide SE
1301	11	0.5	13	1	ABH47707	oligonucleotide SE	c1374	11	0.5	13	1	ABH51372	oligonucleotide SE
1302	11	0.5	13	1	ABC23645	oligonucleotide SE	1375	11	0.5	13	1	ABH51373	oligonucleotide SE
1303	11	0.5	13	1	ABC62371	oligonucleotide SE	1376	11	0.5	13	1	ABH52440	oligonucleotide SE
1304	11	0.5	13	1	ABF95512	oligonucleotide SE	c1377	11	0.5	13	1	ABH53733	oligonucleotide SE
1305	11	0.5	13	1	ABF53322	oligonucleotide SE	c1378	11	0.5	13	1	ABC52789	oligonucleotide SE
1306	11	0.5	13	1	ABH29779	oligonucleotide SE	1379	11	0.5	13	1	ABC59913	oligonucleotide SE
1307	11	0.5	13	1	ABF90042	oligonucleotide SE	1380	11	0.5	13	1	ABC34841	oligonucleotide SE
1308	11	0.5	13	1	ABC42500	oligonucleotide SE	c1381	11	0.5	13	1	ABC61674	oligonucleotide SE
1309	11	0.5	13	1	ABC93440	oligonucleotide SE	c1382	11	0.5	13	1	ABF36011	oligonucleotide SE
1310	11	0.5	13	1	ABCT3244	oligonucleotide SE	1383	11	0.5	13	1	ABF50809	oligonucleotide SE
1311	11	0.5	13	1	ABC50568	oligonucleotide SE	c1384	11	0.5	13	1	ABF78023	oligonucleotide SE
1312	11	0.5	13	1	ABC58758	oligonucleotide SE	c1385	11	0.5	13	1	ABF53323	oligonucleotide SE
1313	11	0.5	13	1	ABC39942	oligonucleotide SE	c1386	11	0.5	13	1	ABH30726	oligonucleotide SE
1314	11	0.5	13	1	ABC91350	oligonucleotide SE	1387	11	0.5	13	1	ABH31070	oligonucleotide SE
1315	11	0.5	13	1	ABF17946	oligonucleotide SE	c1388	11	0.5	13	1	ABF68801	oligonucleotide SE
1316	11	0.5	13	1	ABF18296	oligonucleotide SE	c1389	11	0.5	13	1	ABH16023	oligonucleotide SE
1317	11	0.5	13	1	ABF18297	oligonucleotide SE	1390	11	0.5	13	1	ACD66270	oligonucleotide SE
1318	11	0.5	13	1	ABF36010	oligonucleotide SE	1391	11	0.5	14	1	AAQ61505	oligonucleotide SE
1319	11	0.5	13	1	ABF77165	oligonucleotide SE	1392	11	0.5	14	1	AAV45359	oligonucleotide SE
1320	11	0.5	13	1	ABH29778	oligonucleotide SE	1393	11	0.5	14	1	AAV67069	oligonucleotide SE
1321	11	0.5	13	1	ABH05778	oligonucleotide SE	1394	11	0.5	14	1	AA513213	oligonucleotide SE
1322	11	0.5	13	1	ABH63486	oligonucleotide SE	c1395	11	0.5	14	1	AA95191	oligonucleotide SE
1323	11	0.5	13	1	ABC58759	oligonucleotide SE	c1396	11	0.5	14	1	ABK15310	oligonucleotide SE
1324	11	0.5	13	1	ABC34840	oligonucleotide SE	c1397	11	0.5	15	1	AAQ50075	oligonucleotide SE
1325	11	0.5	13	1	ABC61675	oligonucleotide SE	c1398	11	0.5	15	1	AAQ01717	oligonucleotide SE
1326	11	0.5	13	1	ABC62653	oligonucleotide SE	c1399	11	0.5	15	1	AA54284	oligonucleotide SE
1327	11	0.5	13	1	ABC90469	oligonucleotide SE	c1400	11	0.5	15	1	AAQ00468	oligonucleotide SE
1328	11	0.5	13	1	ABH25889	oligonucleotide SE	c1401	11	0.5	15	1	AAQ37746	oligonucleotide SE
1329	11	0.5	13	1	ABH27698	oligonucleotide SE	c1402	11	0.5	15	1	AAQ37748	oligonucleotide SE
1330	11	0.5	13	1	ABH30727	oligonucleotide SE	c1403	11	0.5	15	1	AAQ37750	oligonucleotide SE
1331	11	0.5	13	1	ABH12112	oligonucleotide SE	c1404	11	0.5	15	1	AAQ37752	oligonucleotide SE
1332	11	0.5	13	1	ABH52441	oligonucleotide SE	c1405	11	0.5	15	1	AAV30161	oligonucleotide SE
1333	11	0.5	13	1	ABC72592	oligonucleotide SE	c1406	11	0.5	15	1	AAV53790	oligonucleotide SE
1334	11	0.5	13	1	ABH19229	oligonucleotide SE	1407	11	0.5	15	1	AAV55081	oligonucleotide SE
1335	11	0.5	13	1	ABH05779	oligonucleotide SE	1408	11	0.5	15	1	AAQ34528	oligonucleotide SE
1336	11	0.5	13	1	ABF02655	oligonucleotide SE	1409	11	0.5	15	1	AAQ64219	oligonucleotide SE
1337	11	0.5	13	1	ABC90468	oligonucleotide SE	1410	11	0.5	15	1	AAQ20650	oligonucleotide SE
1338	11	0.5	13	1	ABC66997	oligonucleotide SE	1411	11	0.5	15	1	AAQ30030	oligonucleotide SE
1339	11	0.5	13	1	ABF48209	oligonucleotide SE	1412	11	0.5	15	1	AAQ02944	oligonucleotide SE
1340	11	0.5	13	1	ABF90043	oligonucleotide SE	1413	11	0.5	15	1	AAQ15932	oligonucleotide SE
1341	11	0.5	13	1	ABH3732	oligonucleotide SE	c1414	11	0.5	15	1	AAQ60696	oligonucleotide SE
1342	11	0.5	13	1	ABC74712	oligonucleotide SE	1415	11	0.5	15	1	AAQ48823	oligonucleotide SE
1343	11	0.5	13	1	ABC62652	oligonucleotide SE	1416	11	0.5	15	1	AAQ45214	oligonucleotide SE
1344	11	0.5	13	1	ABF50808	oligonucleotide SE	1417	11	0.5	15	1	AAQ48826	oligonucleotide SE
1345	11	0.5	13	1	ABH47706	oligonucleotide SE	c1418	11	0.5	15	1	AAQ46482	oligonucleotide SE
1346	11	0.5	13	1	ABF00870	oligonucleotide SE	1419	11	0.5	15	1	AAQ48242	oligonucleotide SE
1347	11	0.5	13	1			c1420	11	0.5	15	1	AAQ45602	oligonucleotide SE





c1567	10.8	0.5	15	1	AAV37811	K-ras mutant DNA c	1640	10.8	0.5	15	1	AAF49421	IGF-I oligonucleot
1568	10.8	0.5	15	1	AAV33235	Wild-type probe us	1641	10.8	0.5	15	1	AAF53514	IGF-I oligonucleot
c1569	10.8	0.5	15	1	AAV32235	Wild-type probe us	c1642	10.8	0.5	15	1	AAF53514	IGF-I oligonucleot
1570	10.8	0.5	15	1	AAV50195	Target DNA for pyr	1643	10.8	0.5	15	1	AAF53515	IGF-I oligonucleot
1571	10.8	0.5	15	1	AAV31759	Transcript tag seq	c1644	10.8	0.5	15	1	AAF46758	IGFBP3 oligonucleo
1572	10.8	0.5	15	1	AAV31560	Tag sequence of a	1645	10.8	0.5	15	1	AAF47508	IGFBP3 oligonucleo
1573	10.8	0.5	15	1	AAV31073	Tag sequence of a	c1646	10.8	0.5	15	1	AAF47625	IGFBP3 oligonucleo
1574	10.8	0.5	15	1	AAV31797	Transcript tag seq	c1647	10.8	0.5	15	1	AAF50111	IGF-I oligonucleot
1575	10.8	0.5	15	1	AAV31169	Tag sequence of a	1648	10.8	0.5	15	1	AAF46787	IGFBP3 oligonucleo
c1576	10.8	0.5	15	1	AAV31025	Tag sequence of a	1649	10.8	0.5	15	1	AAF47505	IGFBP3 oligonucleo
1577	10.8	0.5	15	1	AAV31491	Tag sequence of a	c1650	10.8	0.5	15	1	AAF50792	IGF-I oligonucleot
1578	10.8	0.5	15	1	AAV27396	Peptide nucleic ac	c1651	10.8	0.5	15	1	AAF46391	IGFBP2 oligonucleo
c1579	10.8	0.5	15	1	AAV27396	Peptide nucleic ac	c1652	10.8	0.5	15	1	AAF46756	IGFBP3 oligonucleo
1580	10.8	0.5	15	1	AAV27387	Peptide nucleic ac	1653	10.8	0.5	15	1	AAF49376	IGF-I oligonucleot
c1581	10.8	0.5	15	1	AAV27387	Peptide nucleic ac	c1654	10.8	0.5	15	1	AAF53878	IGF-I oligonucleot
1582	10.8	0.5	15	1	AAV27395	Peptide nucleic ac	c1655	10.8	0.5	15	1	AAF46489	IGFBP2 oligonucleo
c1583	10.8	0.5	15	1	AAV27395	Peptide nucleic ac	c1656	10.8	0.5	15	1	AAF50110	IGF-I oligonucleot
1584	10.8	0.5	15	1	AAV93860	Target sequence w	1657	10.8	0.5	15	1	AAF50901	IGF-I oligonucleot
1585	10.8	0.5	15	1	AAV82055	DNA probe sequence	c1658	10.8	0.5	15	1	AAF52179	IGF-I oligonucleot
c1586	10.8	0.5	15	1	AAV82055	DNA probe sequence	c1659	10.8	0.5	15	1	AAF52634	IGF-I oligonucleot
1587	10.8	0.5	15	1	AAV92431	Rhizoctonia sp. PC	c1660	10.8	0.5	15	1	AAF53239	IGF-I oligonucleot
c1588	10.8	0.5	15	1	AAV64021	Substrate for hamm	1661	10.8	0.5	15	1	AAF45495	IGFBP2 oligonucleo
1589	10.8	0.5	15	1	AAV63941	Substrate for hamm	c1662	10.8	0.5	15	1	AAF46762	IGFBP3 oligonucleo
1590	10.8	0.5	15	1	AAV64114	Substrate for hamm	1663	10.8	0.5	15	1	AAF47078	IGFBP3 oligonucleo
c1591	10.8	0.5	15	1	AAV64114	Substrate for hamm	1664	10.8	0.5	15	1	AAF52692	IGF-I oligonucleot
c1592	10.8	0.5	15	1	AAV63818	Substrate for hamm	c1665	10.8	0.5	15	1	AAF53240	IGF-I oligonucleot
c1593	10.8	0.5	15	1	AAV62752	Substrate for HH r	c1666	10.8	0.5	15	1	AAF53877	IGF-I oligonucleot
1594	10.8	0.5	15	1	AAV62667	Substrate for HH r	1667	10.8	0.5	15	1	AAF45496	IGFBP2 oligonucleo
c1595	10.8	0.5	15	1	AAV90881	Human NR8 gene pro	1668	10.8	0.5	15	1	AAF50571	IGF-I oligonucleot
c1596	10.8	0.5	15	1	AAV90881	Human NR8 gene pro	1669	10.8	0.5	15	1	AAF49420	IGF-I oligonucleot
c1597	10.8	0.5	15	1	AAV90841	Human NR8 gene pro	1670	10.8	0.5	15	1	AAF47832	IGFBP3 oligonucleo
1598	10.8	0.5	15	1	AAV90913	Human NR8 gene pro	1671	10.8	0.5	15	1	AAF50900	IGF-I oligonucleot
c1599	10.8	0.5	15	1	AAV90913	Human NR8 gene pro	c1672	10.8	0.5	15	1	AAF53972	IGF-I oligonucleot
1600	10.8	0.5	15	1	AAA49150	Potential polypuri	c1673	10.8	0.5	15	1	AAF52960	IGF-I oligonucleot
1601	10.8	0.5	15	1	AAV9019	Peptide-nucleic ac	c1674	10.8	0.5	15	1	AAF70011	Human TNFRSF11B ge
c1602	10.8	0.5	15	1	AAV9019	Peptide-nucleic ac	1675	10.8	0.5	15	1	AAF70047	Human TNFRSF11B ge
c1603	10.8	0.5	15	1	AAV3251	N-acetyltransferas	1676	10.8	0.5	15	1	AAF70049	Human TNFRSF11B ge
1604	10.8	0.5	15	1	AAA59902	Murine Op-1 Wt-1/E	1677	10.8	0.5	15	1	AAF70019	Human TNFRSF11B ge
c1605	10.8	0.5	15	1	AAA66946	Human leukocyte an	c1678	10.8	0.5	15	1	AAH28531	Human interleukin-
1606	10.8	0.5	15	1	AAV87040	Probe to AluI huma	c1679	10.8	0.5	15	1	AAH46690	Target virus detec
c1607	10.8	0.5	15	1	AAV68357	Human IRR oligonu	1680	10.8	0.5	15	1	ABX03949	BEV DNA fragment
c1608	10.8	0.5	15	1	ABV57573	Nucleic acid probe	1681	10.8	0.5	15	1	AAH91789	Human inflammatory
c1609	10.8	0.5	15	1	AAH12650	Cystic fibrosis ge	1682	10.8	0.5	15	1	AAF59241	M13mp18 nucleotide
1610	10.8	0.5	15	1	AAH18942	UCP3 polymorphism	c1683	10.8	0.5	15	1	AAF70325	Human DRD2 allele
c1611	10.8	0.5	15	1	AAV02957	Human CHM1 allele	1684	10.8	0.5	15	1	AAF69454	Human IL4Ralpha ge
c1612	10.8	0.5	15	1	AAV91167	Beta tubulin mutat	c1685	10.8	0.5	15	1	AAF73891	Human SLC6A4 allele
1613	10.8	0.5	15	1	AAV24389	Human IL1B gene po	1686	10.8	0.5	15	1	AAF73913	Human SLC6A4 allele
1614	10.8	0.5	15	1	AAV05869	Human cholinergic	1687	10.8	0.5	15	1	ABV61024	N. clavipes spidro
1615	10.8	0.5	15	1	AAV04304	Human DAXX DNA all	c1688	10.8	0.5	15	1	ABK97317	#323 5S-C PCR prim
c1616	10.8	0.5	15	1	AAV04330	Human DAXX DNA all	1689	10.8	0.5	15	1	ABK97489	Human LCAT gene po
c1617	10.8	0.5	15	1	AAF46516	IGFBP2 oligonucleo	1690	10.8	0.5	15	1	ABV59300	ASO probe for plat
c1618	10.8	0.5	15	1	AAF46518	IGFBP2 oligonucleo	1691	10.8	0.5	15	1	ABA98716	PNA FRET probe #5
c1619	10.8	0.5	15	1	AAF46518	IGFBP2 oligonucleo	c1692	10.8	0.5	15	1	ABA98716	PNA FRET probe #5
c1620	10.8	0.5	15	1	AAF46760	IGFBP3 oligonucleo	c1693	10.8	0.5	15	1	ABA97658	Probe z. Unidenti
c1621	10.8	0.5	15	1	AAF7624	IGF-I oligonucleot	1694	10.8	0.5	15	1	ABV43773	Human ATR2 gene p
c1622	10.8	0.5	15	1	AAF53960	IGF-I oligonucleot	1695	10.8	0.5	15	1	ABT06035	Human IGM heavy ch
c1623	10.8	0.5	15	1	AAF46488	IGFBP2 oligonucleo	1696	10.8	0.5	15	1	AAH41859	Target DNA #2 used
1624	10.8	0.5	15	1	AAF47175	IGFBP3 oligonucleo	c1697	10.8	0.5	15	1	AAH41883	ON-25 oligonucleot
c1625	10.8	0.5	15	1	AAF50794	IGF-I oligonucleot	1698	10.8	0.5	15	1	AAH41902	Target RNA used in
1626	10.8	0.5	15	1	AAF45866	IGFBP2 oligonucleo	c1699	10.8	0.5	15	1	AAH41861	ON-6 oligonucleoti
c1627	10.8	0.5	15	1	AAF46392	IGFBP2 oligonucleo	c1700	10.8	0.5	15	1	AAH41884	ON-26 oligonucleot
1628	10.8	0.5	15	1	AAF46784	IGFBP3 oligonucleo	c1701	10.8	0.5	15	1	AAH41855	ON-2 oligonucleoti
1629	10.8	0.5	15	1	AAF47174	IGFBP3 oligonucleo	c1702	10.8	0.5	15	1	AAH41858	ON-4 oligonucleoti
1630	10.8	0.5	15	1	AAF50567	IGF-I oligonucleot	c1703	10.8	0.5	15	1	AAH41897	ON-36 oligonucleot
1631	10.8	0.5	15	1	AAF53963	IGF-I oligonucleot	c1704	10.8	0.5	15	1	AAH41881	ON-23 oligonucleot
1632	10.8	0.5	15	1	AAF45867	IGFBP2 oligonucleo	c1705	10.8	0.5	15	1	AAH41866	ON-10 oligonucleot
1633	10.8	0.5	15	1	AAF47833	IGFBP3 oligonucleo	c1706	10.8	0.5	15	1	AAH41900	ON-39 oligonucleot
1634	10.8	0.5	15	1	AAF49379	IGF-I oligonucleot	c1707	10.8	0.5	15	1	AAH41856	ON-3 oligonucleoti
1635	10.8	0.5	15	1	AAF47077	IGFBP3 oligonucleo	c1708	10.8	0.5	15	1	AAH41862	ON-7 oligonucleoti
c1636	10.8	0.5	15	1	AAF49115	IGF-I oligonucleot	c1709	10.8	0.5	15	1	AAH41882	ON-24 oligonucleot
c1637	10.8	0.5	15	1	AAF52177	IGF-I oligonucleot	c1710	10.8	0.5	15	1	AAH41854	ON-1 oligonucleoti
c1638	10.8	0.5	15	1	AAF52959	IGF-I oligonucleot	c1711	10.8	0.5	15	1	AAH41860	ON-5 oligonucleoti
c1639	10.8	0.5	15	1	AAF49116	IGF-I oligonucleot	1712	10.8	0.5	15	1	AAH41865	Target DNA #3 used

1713 10.8 0.5 15 1 ABZ34638 HIV-1 reverse tran  
 1714 10.8 0.5 15 1 ABZ34221 HIV-1 reverse tran  
 1715 10.8 0.5 15 1 ABK32514 Human pancreatic c  
 1716 10.8 0.5 15 1 ABK31978 Human colon cancer  
 1717 10.8 0.5 15 1 ABK32713 Human colorectal a  
 1718 10.8 0.5 15 1 ABK32751 Human colorectal a  
 1719 10.8 0.5 15 1 ABK32026 Human colon cancer  
 1720 10.8 0.5 15 1 ABK31222 Human colon cancer  
 1721 10.8 0.5 15 1 ABK32445 Human colon cancer  
 1722 10.8 0.5 15 1 ABK32920 Probe z for assayi  
 1723 10.8 0.5 15 1 ABK00603 Hepatitis C virus  
 1724 10.8 0.5 15 1 ABK00518 Hepatitis C virus  
 1725 10.8 0.5 15 1 ABK00871 Hepatitis C virus  
 1726 10.8 0.5 15 1 ABK01074 Hepatitis C virus  
 1727 10.8 0.5 15 1 ABK01167 Hepatitis C virus  
 1728 10.8 0.5 15 1 ABK01167 Hepatitis C virus  
 1729 10.8 0.5 15 1 ABK00994 Hepatitis C virus  
 1730 10.8 0.5 15 1 AAL48087 Human neurotrophin  
 1731 10.8 0.5 15 1 AAL48094 Human neurotrophin  
 1732 10.8 0.5 15 1 ABV799196 Human CYP7A1 allele  
 1733 10.8 0.5 15 1 ABN79956 Human CYP2D6 gene  
 1734 10.8 0.5 15 1 ABK98103 Triple helix formi  
 1735 10.8 0.5 15 1 ABK76497 M. tuberculosis 23  
 1736 10.8 0.5 15 1 ABZ69603 Human telomerase c  
 1737 10.8 0.5 15 1 ABK93419 Sequence specific  
 1738 10.8 0.5 15 1 ABV72560 Consensus sequence  
 1739 10.8 0.5 15 1 ABK16338 DNase footprint ta  
 1740 10.8 0.5 15 1 ABK16339 DNase footprint co  
 1741 10.8 0.5 15 1 ABK16343 DNase footprint pr  
 1742 10.8 0.5 15 1 ACD56140 HBV enzymatic nucl  
 1743 10.8 0.5 15 1 ACA62875 Repeated nucleic a  
 1744 10.8 0.5 15 1 ADC66181 Human CFTR related  
 1745 10.8 0.5 15 1 ADC66180 Human CFTR related

## ALIGNMENTS

RESULT 1  
 AAA95191/c  
 ID AAA95191 standard; DNA; 25 BP.  
 XX  
 AC AAA95191;  
 XX  
 DT 12-JAN-2001 (first entry)  
 XX  
 DE Reverse primer used to amplify exon 6 of TNFR1 gene.  
 XX  
 KW TNFR1; tumour necrosis factor receptor; polymorphism; human; tumour;  
 KW cancer; apoptosis; bacterial infection; primer; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WC200050436-A1.  
 XX  
 XX 31-AUG-2000.  
 XX  
 PF 23-FEB-2000; 2000WO-US004606.  
 XX  
 PR 23-FEB-1999; 99US-0121314P.  
 XX  
 PA (GENA-) GENAISSANCE PHARM INC.  
 PA (NAND/) NANDABALAN K.  
 PA (SCHU/) SCHULZ V P.  
 PA (STEP/) STEPHENS J C.  
 PA (CHEW/) CHEW A.  
 XX  
 XX Nandabalan K, Schulz VP, Stephens JC, Chew A;  
 PI WPI; 2000-543909/49.  
 XX  
 XX Polynucleotides comprising polymorphic variants of a reference sequence  
 PT for tumor necrosis factor receptor 1 (TNFR1), useful for studying the

biological function of TNFR1 and identifying drugs targeting the protein  
 for treating disorders.  
 XX Example 1; Page 31; 79pp; English.  
 XX The present invention relates to polymorphic variants of the tumour  
 necrosis factor receptor 1 (TNFR1) gene. The sequence of the gene is  
 given in AAA95102, AAA95103 and AAA95104. The polymorphisms were  
 identified by amplifying and sequencing regions of the gene. Twelve  
 polymorphic loci were discovered. Of these twelve polymorphisms, four can  
 cause a change in the TNFR1 protein. The present sequence is a primer  
 used to amplify part of the TNFR1 gene. The TNFR1 polymorphisms may be  
 useful for studying the biological function of TNFR1 as well as for  
 identifying drugs targeting the protein for treatment of disorders  
 CC related to its abnormal expression or function such as tumours, apoptosis  
 CC related disorders and bacterial infection  
 XX Sequence 25 BP; 5 A; 8 C; 4 G; 8 T; 0 U; 0 Other;  
 SQ Query Match 1.2%; Score 25; DB 1; Length 25;  
 Best Local Similarity 100.0%; Pred. No. 0.73;  
 Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 855 GAATGTTAAGGCGACTGAGGACTCA 879  
 Db 25 GAATGTTAAGGCGACTGAGGACTCA 1  
 RESULT 2  
 AAZ09169/c  
 ID AAZ09169 standard; DNA; 29 BP.  
 XX  
 AC AAZ09169;  
 XX  
 DT 20-MAR-2003 (revised)  
 DT 18-OCT-1999 (first entry)  
 XX  
 DE Human 55kDa tumour necrosis factor binding protein PCR primer 2.  
 KW Tumour necrosis factor binding protein; TNF; insoluble protein; agonist;  
 KW anti-inflammatory; antimalarial; treatment; septic shock; inflammation;  
 KW autoimmune glomerulonephritis; cerebral malaria; immune response;  
 KW antagonist; diagnosis; PCR primer; ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 XX  
 PN EP939121-A2.  
 XX  
 PD 01-SEP-1999.  
 XX  
 PF 31-AUG-1990; 99EP-00100703.  
 XX  
 PR 12-SEP-1989; 89CH-00003319.  
 PR 08-MAR-1990; 90CH-00000746.  
 PR 20-APR-1990; 90CH-00001347.  
 PR 31-AUG-1990; 90EP-00116707.  
 XX  
 PA (HOFF) HOFFMANN LA ROCHE & CO AG F.  
 XX  
 PI Brockhaus M, Dembic Z, Gentz R, Lesslauer W, Loetscher H;  
 PI Schlaeager E;  
 XX  
 DR WPI; 1999-480840/41.  
 XX  
 PT New insoluble proteins, and fragments, that bind to tumor necrosis  
 PT factor, used to treat e.g. septic shock or cerebral malaria.  
 XX  
 PS Example 11; Page 16; 25pp; German.  
 XX  
 CC This invention describes novel homogeneous insoluble proteins (I), their  
 CC (insoluble fragments (Ia) and their salts that can bind tumour necrosis  
 CC factor (TNF). The products of the invention have anti-inflammatory and

CC antimalarial activity. (I) and (Ia) are used (i) to treat diseases in  
 CC which TNF is involved (e.g. septic shock, autoimmune glomerulonephritis,  
 CC cerebral malaria, immune responses and inflammation), (ii) to purify TNF,  
 CC (iii) to identify TNF (ant)agonists and (iv) for diagnostic determination  
 CC of TNF in body fluids. Antibodies raised against (I) are used for  
 CC affinity purification of (I). This sequence represents a PCR primer used  
 CC in the amplification of the TNF binding protein of the invention.  
 CC (Updated on 20-MAR-2003 to correct PF field.) (Updated on 20-MAR-2003 to  
 CC correct PR field.)  
 XX  
 SQ Sequence 29 BP; 5 A; 7 C; 9 G; 8 T; 0 U; 0 Other;

Query Match 1.1%; Score 23.8; DB 1; Length 29;  
 Best Local Similarity 92.6%; Pred. No. 2.6;  
 Matches 25; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 869 CTGAGGACTCAGGCACACAGTCTCT 895  
 Db 29 CTGAGGACTCAGGCACACAGTCTCT 3

RESULT 3  
 AAH48858/c  
 ID 'AAH48858 standard; DNA; 29 BP.

XX AAH48858;  
 XX  
 DT 12-NOV-2001 (first entry)  
 XX Human 55 kD TNF $\beta$  extracellular fragment PCR primer 2.

XX TNF; tumor necrosis factor binding protein; TNF $\beta$ ; treatment;  
 KW insoluble protein; antiinflammatory; immunosuppressive; antibacterial;  
 KW antiprotozoal; treatment; meningococcal sepsis; cerebral malaria;  
 KW autoimmune glomerulonephritis; PCR primer; ss.

XX Homo sapiens.  
 OS  
 PN EP1132471-A2.

XX 12-SEP-2001.

PF 31-AUG-1990; 2001EP-00108117.

XX 12-SEP-1989; 89CH-00003319.

PR 08-MAR-1990; 90CH-00000746.

PR 20-APR-1990; 90CH-00001347.

PR 31-AUG-1990; 90EP-00116707.

PR 31-AUG-1990; 99EP-00100703.

XX (HOFF ) HOFFMANN LA ROCHE & CO AG F.

PI Brockhaus M, Dembic Z, Gentz R, Lesslauer W, Loetscher H;  
 PI Schlaeger E;

DR WPI; 2001-559312/63.

XX New homogeneous, insoluble proteins that bind tumor necrosis factor  
 PT (TNF), useful for treating TNF-mediated disorders, e.g. inflammation.

PS Example 11; Page 16; 26pp; German.

XX This invention describes novel insoluble proteins (I), also their  
 CC (insoluble) fragments and pharmaceutically acceptable salts, able to bind  
 CC tumor necrosis factor (TNF) and in homogeneous form. The products of the  
 CC invention have antiinflammatory, immunosuppressive, antibacterial,  
 CC antiprotozoal activity. (I), and related recombinant proteins, are used  
 CC to treat diseases mediated by TNF, e.g. shock in cases of meningococcal  
 CC sepsis; development of autoimmune glomerulonephritis and cerebral  
 CC malaria. Also (I), or antibodies specific for them, are used for  
 CC diagnostic determination of TNF in body fluids, for affinity purification  
 CC of TNF and for identifying (ant)agonists of TNF. This sequence represents  
 CC a PCR primer used in the amplification of the human 55 kD TNF $\beta$  described

CC in the method of the invention  
 XX  
 SQ Sequence 29 BP; 5 A; 7 C; 9 G; 8 T; 0 U; 0 Other;

Query Match 1.1%; Score 23.8; DB 1; Length 29;  
 Best Local Similarity 92.6%; Pred. No. 2.6;  
 Matches 25; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 869 CTGAGGACTCAGGCACACAGTCTCT 895  
 Db 29 CTGAGGACTCAGGCACACAGTCTCT 3

RESULT 4  
 AAT94017/c  
 ID AAT94017 standard; DNA; 21 BP.

XX AAT94017;

DT 19-MAR-1998 (first entry)

XX Primer for TPO/hCG fusion gene.

XX Fusion protein; thrombopoietin; TPO; human chorionic gonadotrophin; hCG;  
 KW PCR primer; ss.

XX Synthetic.

OS Homo sapiens.

XX WO9730161-A1.

XX 21-AUG-1997.

PF 20-FEB-1997; 97WO-US002315.

XX 20-FEB-1996; 96US-0011936P.

XX (ISTF ) ARS APPLIED RES SYSTEMS HOLDING NV.

PI Campbell RK, Jameson BA, Chappel SC;

XX WPI; 1997-425036/39.

XX Hybrid dimeric protein comprising two co-expressed units - each based on  
 PT receptor or ligand and a subunit of a heterodimeric hormone, especially  
 PT FSH, for inducing follicular maturation.

XX Example; Page 16; 60pp; English.

XX A novel fusion protein comprises 2 dimer forming co-expressed amino acid  
 CC sequences, each consisting of a homodimeric or heterodimeric receptor  
 CC chain or ligand, with ligand-receptor binding activity, bound directly or  
 CC via a peptide linker to a subunit of a heterodimeric protein hormone  
 CC capable of forming a heterodimer with the hormone's other subunits. The  
 CC fusion protein, e.g. the thrombopoietin (TPO)/human chorionic  
 CC gonadotrophin (hCG) fusion protein encoded by the fusion gene amplified  
 CC by the present sequence, significantly increases the biological activity  
 CC of the hormone component, reducing the requirement for hormone itself and  
 CC the number of injections needed

XX Sequence 21 BP; 2 A; 5 C; 7 G; 7 T; 0 U; 0 Other;  
 Query Match 1.0%; Score 21; DB 1; Length 21;  
 Best Local Similarity 100.0%; Pred. No. 5.1;  
 Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 868 ACTGAGGACTCAGGCACCA 888  
 Db 21 ACTGAGGACTCAGGCACCA 1

RESULT 5  
 AAL49614/c

```

ID AAL49614 standard; DNA; 21 BP.
XX AC
XX AAL49614;
XX
XX 27-NOV-2002 (first entry)
XX
XX Tumour differentiation effecting protein TL4 related PCR primer #18.
DE Mouse; tumour differentiation; rhabdosarcoma; leiomyosarcoma; rat; ss;
XX muscular dystrophy; uterine myoma; cytostatic; plasmic change; TL4;
XX human; PCR; primer.
XX Unidentified.
XX OS
XX WO200266049-A1.
XX FN
XX
XX 29-AUG-2002.
XX PD
XX
XX 21-FEB-2002; 2002WO-JP001536.
XX PF
XX
XX 23-FEB-2001; 2001JP-00049450.
XX PR
XX
XX (TAKE ) TAKEDA CHEM IND LTD.
XX PA
XX
XX Hikichi Y, Shintani Y, Matsui H;
XX PI
XX
XX WPI; 2002-674894/72.
XX DR
XX
XX Plasmic change agents and antibodies to them for diagnosis and treatment
XX of tumours of muscle tissue and of muscular dystrophy.
XX
XX Example 1; Page 127; 136pp; Japanese.
XX
XX The present invention relates to plasmic change agents with cell
XX differentiation activity containing protein TL4. These can be used in the
XX treatment, prevention and diagnosis of rhabdosarcoma, leiomyosarcoma,
XX muscular dystrophy and uterine myeloma. The present sequence is a PCR
XX primer used in the exemplification of the invention
XX.
XX Sequence 21 BP; 1 A; 5 C; 6 G; 9 T; 0 U; 0 Other;
XX
XX Query Match 1.0%; Score 21; DB 1; Length 21;
XX Best Local Similarity 100.0%; Pred. No. 5.1;
XX Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 727 TGCACGAGAGAAACAGACACC 747
XX 21 TGCACGAGAGAAACAGACACC 1
XX
XX RESULT 6
XX ABA99921/c
XX ID ABA99921 standard; DNA; 29 BP.
XX
XX ABA99921;
XX AC
XX
XX 05-JUL-2002 (first entry)
XX DT
XX
XX Human TNFR1 PCR primer SEQ ID 15.
XX DE
XX
XX Prodrug; TNF; tumour necrosis factor; selectokine; chimeric; W24; W33;
XX cytostatic; immunomodulatory; antiangiogenic; apoptosis inducer;
XX gene therapy; scfv antibody OS4; fibroblast activation protein; tenascin;
XX solid tumour; angiogenesis; treatment; infection; metabolic disease; PCR;
XX primer; ss.
XX
XX Homo sapiens.
XX OS
XX
XX WO200222833-A1.
XX FN
XX
XX 21-MAR-2002.
XX PD
XX
XX 17-SEP-2001; 2001WO-EP010730.
XX PF

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```

XX 15-SEP-2000; 2000DE-01045592.
XX PR
XX
XX (UYST-) UNIV STUTTGART.
XX PA
XX (PFIZ/) PFIZENMAIER K.
XX
XX Pfizenmaier K, Wuest T, Moosmayer D, Grell M, Scheurich P;
XX PI
XX
XX WPI; 2002-362351/39.
XX DR
XX
XX New polypeptide prodrug, useful e.g. for treating tumors, contains
XX targeting region, active agent and attached inhibitor that is
XX proteolytically cleaved in target cells.
XX
XX Example 6; Page 47; 52pp; German.
XX
XX This invention describes a novel polypeptide (I) comprising, in the N to
XX C direction, a region (R1) that recognises selectively a specific
XX macromolecule on a cell surface and/or a component of the extracellular
XX matrix, peptide linker, a region (R2) with biological activity for a
XX specific target molecule, a region (R3) that has a processing site and a
XX region (R4) that inhibits the activity of R2, by intramolecular bonding
XX and/or interaction. The products of the invention have cytostatic,
XX immunomodulatory and antiangiogenic activity, induce apoptosis and can be
XX used for gene therapy. Kym-1 cells (20000) were incubated with the
XX prodrug W24, containing, essentially, the single-chain Fv antibody OS4,
XX specific for human fibroblast activation protein, trimerization linker, a
XX mutant form of the tumour necrosis factor (TNF) precursor protein, a
XX region with a proteolytic cleavage site, and human TNF receptor-1
XX fragment, and with trypsin (activator) for 5 minutes. After 16 hours,
XX cell viability was determined by MTT staining. Activated W24 had LD50
XX about 0.5 ng/ml, comparable with that for wild-type TNF and 4000 times
XX higher than for uncleaved W24. (I), also nucleic acids encoding them and
XX related vectors, are useful particularly for treating solid tumours
XX and/or pathological angiogenesis, also generally for treating infections
XX and metabolic diseases. (I) are prodrug forms of R2 that have
XX unacceptable toxicity when administered systemically (specifically tumour
XX necrosis factor) and allow these compounds to be administered safely with
XX retention of, or even increase in, therapeutic activity. R2 is released
XX only in target tissue, resulting in a high local concentration, and
XX activity is potentiated by co-activation of receptors. This sequence
XX represents a PCR primer for the amplification of the human TNFR1 fragment
XX used in the construction of the TNF-selectokine W24 and W33 prodrugs
XX described in the disclosure of the invention
XX
XX Sequence 29 BP; 3 A; 9 C; 10 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 1.0%; Score 21; DB 1; Length 29;
XX Best Local Similarity 82.8%; Pred. No. 15;
XX Matches 24; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
XX
XX 739 CAGAACACCGGTGCACCTGCCATCGCAGG 767
XX 29 CAGAACACCGGTGCACCGGATCCGAGG 1
XX
XX RESULT 7
XX AAV55815
XX ID AAV55815 standard; DNA; 24 BP.
XX
XX AAV55815;
XX AC
XX
XX 27-AUG-2003 (revised)
XX DT
XX 18-NOV-1998 (first entry)
XX DT
XX
XX Multimerisation of minimal motifs using primer ZGS2.
XX DE
XX
XX Fusion protein; stabilising polypeptide; proteolytic degradation;
XX resistance; half-life; autoimmune disease; inflammation; nitro drug;
XX IkappaB regulator protein; inflammatory bowel disease; in vivo imaging;
XX nitroreductase protein; enzyme therapy; prodrug therapy; protease;
XX cancer; pathological condition; minimal motif; PCR primer; ss.
XX
XX

```



PT core protein with a stabilising polypeptide comprising a peptide sequence  
 PT containing glycine repeats.  
 XX

PS Disclosure; Page 72; 120pp; English.

XX Sequences shown in AAV55812 to AAV55827 represent primers used in the  
 CC course of the invention for the multimerisation of minimal motifs. The  
 CC invention provides a method for increasing the resistance of a core  
 CC protein to proteolytic degradation that comprises linking or inserting  
 CC onto or into the core protein a stabilising polypeptide of formula  
 CC ((Glya)(Glyb))<sub>n</sub> where Glya, Glyb, Glyc are 1-6 sequential Gly  
 CC residues and X, Y, Z are Ala, Ser, Val, Ile, Leu, Met, Phe, Pro or Thr  
 CC and n can be anything between 1-66. X, Y and Z need not be identical from  
 CC n repeat to n repeat. Alternatively a nucleic acid encoding a stabilising  
 CC polypeptide can be linked onto or inserted into a nucleic acid encoding a  
 CC core protein. The fusion proteins of the invention are more resistant to  
 CC degradation by proteases and, thus, have a longer half-life than the  
 CC unfused core protein. The products can be used for treating autoimmune  
 CC diseases, cancer and inflammation. In particular, the core protein may be  
 CC an IkappaB regulator protein for the treatment of inflammatory bowel  
 CC disease, or a nitroreductase protein which can activate nitro drugs in  
 CC enzyme/prodrug therapy to treat cancer or other pathological conditions.  
 CC The fusion proteins can also be used in diagnostic methods such as in  
 CC vivo imaging. (Updated on 27-AUG-2003 to correct OS field.)  
 XX

SQ Sequence 24 BP; 3 A; 14 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.9%; Score 19.2; DB 1; Length 24;

Best Local Similarity 87.5%; Pred. No. 25;

Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 1125 TTCCACCTTCACCTCCAGTCCAC 1148

Db 1 TTCCACCGCACCTCCAGTCTCTC 24

RESULT 10

AAAF24737/c

ID AAF24737 standard; DNA; 27 BP.

XX AAF24737;

XX 20-APR-2001 (first entry)

XX PCR primer used to amplify DNA encoding CDB-Tma peptide.

XX Protein production; food processing; protein antibiotic; feed enzyme;

XX CDB-Tma; PCR primer; ss.

XX Unidentified.

XX WO200077174-A1.

XX 21-DEC-2000.

XX 07-JUN-2000; 2000WO-11000330.

XX 10-JUN-1999; 99US-00329234.

XX (CBT-) CBD TECHNOLOGIES LTD.

XX (YISS) YISSUM RES DEV CO HEBREW UNIV JERUSALEM.

XX Shani Z, Shoseyov O;

XX WPI; 2001-112219/12.

XX Expressing and isolating recombinant protein in a plant, useful for

PT producing large quantities of recombinant proteins, by expressing a

PT fusion protein including a cellulose binding peptide fused to a

PT recombinant protein.

XX Example; Page 48; 87pp; English.

XX

CC The specification describes a method for expressing and isolating a  
 CC recombinant protein in a plant. The method comprising expressing a fusion  
 CC protein including the recombinant protein and a cellulose binding peptide  
 CC fused to it, where the fusion protein is compartmentalised and  
 CC sequestered within plant cells, plant derived tissue or cultured plant  
 CC cells. The method is useful for obtaining large quantities of the  
 CC recombinant proteins and protein products in a simple and cost-effective  
 CC manner. Recombinant proteins may be used commercially, such as in the  
 CC food processing industry, e.g. glucosylases and glucose isomerases are  
 CC used for converting starch to high fructose corn syrup, proteinases for  
 CC the hydrolysis of high molecular weight proteins and in manufacturing  
 CC food or alcoholic beverages, pectinesterases for pectin hydrolysis in  
 CC food industry, lipases for cleaving ester linkage in triglycerides, and  
 CC for effluent treatment. The recombinant proteins may further be used to  
 CC produce protein antibiotics, which can be used in healing processes, and  
 CC to produce animal feed enzymes. PCR primers AAF24736-37 were used to  
 CC amplify DNA encoding a CDB-Tma peptide. The amplified fragment was used  
 CC to produce the fusion proteins of the invention  
 XX

SQ Sequence 27 BP; 7 A; 4 C; 12 G; 4 T; 0 U; 0 Other;

Query Match 0.9%; Score 19.2; DB 1; Length 27;

Best Local Similarity 87.5%; Pred. No. 37;

Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 1246 TCCGACCCCATCCCAACCCCTT 1269

Db 26 TCCGACCCCATCCCAACCCCTT 3

RESULT 11

AAV55821

ID AAV55821 standard; DNA; 24 BP.

XX AAV55821;

XX 27-AUG-2003 (revised)

XX 18-NOV-1998 (first entry)

XX Multimerisation of minimal motifs using primer ZGY2.

XX Fusion protein; stabilising polypeptide; proteolytic degradation;

XX resistance; half-life; autoimmune disease; inflammation; nitro drug;

XX IkappaB regulator protein; inflammatory bowel disease; in vivo imaging;

XX nitroreductase protein; enzyme therapy; prodrug therapy; protease;

XX cancer; pathological condition; minimal motif; PCR primer; ss.

XX Synthetic.

XX Human herpesvirus 4.

XX WO9822577-A1.

XX 28-MAY-1998.

XX 17-NOV-1997; 97WO-1B001508.

XX 15-NOV-1996; 96US-0030986P.

XX 25-JUN-1997; 97US-0048945P.

XX (MASU/) MASUCCI M G.

XX Masucci MG;

XX WPI; 1998-312463/27.

XX New fusion proteins resistant to proteolytic degradation - comprising a

PT core protein with a stabilising polypeptide comprising a peptide sequence

PT containing glycine repeats.

XX Disclosure; Page 72; 120pp; English.

XX

CC Sequences shown in AAV55812 to AAV55827 represent primers used in the

CC course of the invention for the multimerisation of minimal motifs. The

CC invention provides a method for increasing the resistance of a core  
CC protein to proteolytic degradation that comprises linking or inserting  
CC onto or into the core protein a stabilising polypeptide of formula  
CC [(Gly)X(Glyb)X(Glyc)Z]<sub>n</sub> where Glya, Glyb, Glyc are 1-6 sequential Gly  
CC residues and X, Y, Z are Ala, Ser, Val, Ile, Leu, Met, Phe, Pro or Thr  
CC and n can be anything between 1-66. X, Y and Z need not be identical from  
CC n repeat to n repeat. Alternatively a nucleic acid encoding a stabilising  
CC polypeptide can be linked onto or inserted into a nucleic acid encoding a  
CC core protein. The fusion proteins of the invention are more resistant to  
CC degradation by proteases and, thus, have a longer half-life than the  
CC unfused core protein. The products can be used for treating autoimmune  
CC diseases, cancer and inflammation. In particular, the core protein may be  
CC an IkappaB regulator protein for the treatment of inflammatory bowel  
CC disease, or a nitroreductase protein which can activate nitro drugs in  
CC enzyme/prodrug therapy to treat cancer or other pathological conditions.  
CC The fusion proteins can also be used in diagnostic methods such as in  
CC vivo imaging. (Updated on 27-AUG-2003 to correct OS field.)  
XX  
SQ Sequence 24 BP; 5 A; 13 C; 2 G; 4 T; 0 U; 0 Other;

Query Match 0.9%; Score 18.8; DB 1; Length 24;  
Best Local Similarity 90.3%; Pred. No. 32;  
Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1126 TCACCTTCACCTCCAGCTCCA 1147  
Db 2 TCACCCGCGACCTCCAGCTCCA 23

RESULT 12  
ABK97993/c  
ID ABK97993 standard; DNA; 23 BP.  
XX  
AC ABK97993;  
XX  
DT 07-OCT-2002 (first entry)  
XX  
DE Cell-TRAP method associated GATA mut oligonucleotide.  
DE Transcription factor; transcription factor-responsive element; ds; TPFE;  
KW Transcription activation; Cell-TRAP.  
XX  
OS Synthetic.  
OS WC200252039-A2.  
PN 04-JUL-2002.  
XX  
XX 21-DEC-2001; 2001WO-CA001861.  
XX  
XX 27-DEC-2000; 2000CA-02327581.  
XX (GENE-) GENEKA BIOTECHNOLOGY INC.  
PA  
XX Blais Y, Rousseau P, Leblanc B, Camato RN;  
PI WPI; 2002-575388/61.  
XX  
XX A Cell-TRAP method, useful for producing or validating therapeutic  
PT compounds, by employing a recombinant cell-based library that carry  
PT constructs driven by a minimal promoter and a transcription factor-  
PT responsive element.  
XX  
XX Disclosure; Page 24; 44pp; English.  
XX  
XX This invention relates to a cell-TRAP method for selecting and producing  
CC a therapeutic compound which is presumed selective for, one or a  
CC restricted set of given transcriptional pathways and cell types by  
CC employing a recombinant cell-based library that carries a construct  
CC comprising a reporter gene driven by a minimal promoter and a  
CC transcription factor-responsive element (TPFE). The invention also  
CC comprises a method for validating a putative compound as a selective  
CC therapeutic compound towards a transcription factor response element. The

CC method of the invention is useful for determining the transcriptional  
CC activation pathways used by any compound that is biologically active in a  
CC cell. This method allows a global view of gene transcription activation  
CC in response to diverse stimuli in multiple environments and is a  
CC significant improvement over case-by-case approaches, which would be  
CC limited to certain aspects of gene activation. It permits to save on  
CC clinical trials by screening properly the compounds that would have a  
CC lesser probability of providing undesirable, even severe side effects.  
CC The present sequence represents a double stranded oligonucleotide probe  
CC recognised by a specific transcription factor which is used in the method  
CC of the invention  
XX  
SQ Sequence 23 BP; 2 A; 9 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 18.2; DB 1; Length 23;  
Best Local Similarity 87.0%; Pred. No. 40;  
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1183 CCGCGCAGAGAGGTGGCACC 1205  
Db 23 CCGCGCAGAGAGGTGGCAGTGCC 1

RESULT 13  
AAQ61892/c  
ID AAQ61892 standard; DNA; 25 BP.  
XX  
AC AAQ61892;  
XX  
DT 25-MAR-2003 (revised)  
DT 04-NOV-1994 (first entry)  
XX  
DE HSV replication inhibiting oligomer, ISIS no 5366.  
DE  
XX Inhibition; replication; herpes simplex virus; HSV; HIV;  
KW human cytomegalovirus; influenza virus; inflammation;  
KW neurological disorders; phospholipase A2 activity; hyperproliferation;  
KW malignancy; cardiovascular disease; snake bite; malignancy;  
KW telomere length; retard; aging; ss.  
XX  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT misc\_feature 1..25  
FT FT /\*tag= a  
FT FT /note= "Phosphorothionate intersugar linkages"  
XX  
XX WO9408053-A1.  
XX  
XX 14-APR-1994.  
XX  
XX 29-SEP-1993; 93WO-US009297.  
XX  
XX 29-SEP-1992; 92US-00954185.  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Hanecak RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;  
PI Ecker DJ, Vickers TA, Wyatt JR, Imbach JL;  
XX  
XX WPI; 1994-135613/16.  
XX  
XX New modified oligo-nucleotide contg guanine quartet - inhibits activity  
PT of viruses, e.g. HIV, and phospholipase A2 and modulates telomere length  
PT of chromosomes.  
XX  
XX Claim 5; Page 19; 144pp; English.  
XX  
XX The sequences given in AAQ61825-50 and AAQ61886-906 are oligonucleotides  
CC which contain a G4 or two G3 stretches and which may be used for  
CC inhibiting replication of herpes simplex virus (HSV). Oligonucleotides  
CC such as these may also be used for inhibiting activity of HIV, human  
CC cytomegalovirus or influenza virus, or for treating inflammatory and



CC neurological disorders caused by phospholipase A2 activity in cases of  
 CC hyperproliferation, malignancy, cardiovascular disease and snake bite.  
 CC They may also be used for inhibiting division of malignant cells by  
 CC modulating telomere length, which may also retard aging. (Updated on 25-  
 CC MAR-2003 to correct PN field.)

SQ Sequence 25 BP; 0 A; 0 C; 17 G; 8 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 18.2; DB 1; Length 25;  
 Best Local Similarity 87.0%; Pred. No. 53;  
 Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1244 CCTCCGACCCCATCCCAACCCC 1266  
 |||||  
 DB 25 CCCCCAACCCCAACCCCAACCCC 3

RESULT 14  
 AAQ61893/C  
 ID AAQ61893 standard; DNA; 25 BP.

XX AC AAQ61893;  
 XX 25-MAR-2003 (revised)  
 DT 04-NOV-1994 (first entry)  
 XX HSV replication inhibiting oligomer, ISIS no 5367.

XX Inhibition; replication; herpes simplex virus; HSV; HIV;  
 KW human cytomegalovirus; influenza virus; inflammation;  
 KW neurological disorders; phospholipase A2 activity; hyperproliferation;  
 KW malignancy; cardiovascular disease; snake bite; malignancy;  
 KW telomere length; retard; aging; ss.

OS Synthetic.  
 XX Key Location/Qualifiers  
 FH misc\_feature 1..25  
 FT /tag= a  
 FT /note= "Phosphorothionate intersugar linkages"

XX WO9408053-A1.  
 XX 14-APR-1994.  
 XX 29-SEP-1993; 93WO-US009297.  
 XX 29-SEP-1992; 92US-00954185.  
 XX (ISIS-) ISIS PHARM INC.

XX Hanecak RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;  
 PI Ecker DJ, Vickers TA, Wyatt JR, Imbach JL;  
 XX WPI; 1994-135613/16.

XX New modified oligo-nucleotide contg guanine quartet - inhibits activity  
 PT of viruses, e.g. HIV, and phospholipase A2 and modulates telomere length  
 PT of chromosomes.

XX Disclosure; Page 19; 144pp; English.

XX The sequences given in AAQ61825-50 and AAQ61886-906 are oligonucleotides  
 CC which contain a G4 or two G3 stretches and which may be used for  
 CC inhibiting replication of herpes simplex virus (HSV). Oligonucleotides  
 CC such as these may also be used for inhibiting activity of HIV, human  
 CC cytomegalovirus or influenza virus, or for treating inflammatory and  
 CC neurological disorders caused by phospholipase A2 activity in cases of  
 CC hyperproliferation, malignancy, cardiovascular disease and snake bite.  
 CC They may also be used for inhibiting division of malignant cells by  
 CC modulating telomere length, which may also retard aging. (Updated on 25-  
 CC MAR-2003 to correct PN field.)

SQ Sequence 25 BP; 0 A; 0 C; 17 G; 8 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 18.2; DB 1; Length 25;  
 Best Local Similarity 87.0%; Pred. No. 53;  
 Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1244 CCTCCGACCCCATCCCAACCCC 1266  
 |||||  
 DB 25 CCCCCAACCCCAACCCCAACCCC 3

RESULT 15  
 AAQ97978/C  
 ID AAQ97978 standard; DNA; 25 BP.

XX AC AAQ97978;  
 XX 25-MAR-2003 (revised)  
 DT 19-OCT-1995 (first entry)  
 XX Peptide nucleic acid oligomer targetting HIV gene.

XX Peptide nucleic acid; PNA; HIV; human immunodeficiency virus; AIDS;  
 KW antiviral; antisense; triple helix; ss.

OS Synthetic.

XX Key Location/Qualifiers  
 FH misc\_feature 1..25  
 FT /tag= a  
 FT /note= "at least one (and preferably all) of the backbone  
 FT subunits are composed of N-acetyl N-(2-aminoethyl)glycine  
 FT peptide residues, the nucleobase being attached  
 FT covalently to the acetyl group and the peptide linkage  
 FT being formed by condensation of the glycine carboxy group  
 FT of one residue with the amino group of the 2-aminoethyl  
 FT moiety in the next residue"

XX WO9504068-A1.  
 XX 09-FEB-1995.  
 XX 28-JUL-1994; 94WO-US008517.  
 XX 29-JUL-1993; 93US-00099718.  
 XX (ISIS-) ISIS PHARM INC.

XX Ecker DJ;  
 XX WPI; 1995-082179/11.

XX Oligomer hybridisable to HIV sequence and contg. peptide nucleic acid  
 PT sub:unit - binds in complementary manner to DNA and RNA, and useful for  
 PT modulating HIV viral activity, e.g. in treating AIDS.

XX Claim 2; Page 176; 186pp; English.

XX New peptide nucleic acid (PNA) oligomers are provided which (a) consist  
 CC of naturally occurring nucleobases covalently bound to a polyamide  
 CC backbone and (b) hybridise to the translation initiation AUG region, 5'  
 CC untranslated region (5' UTR), 3' untranslated region (3' UTR), splice  
 CC junctions or coding sequence of a human immunodeficiency virus gene  
 CC chosen from env, gag, pol, rev and tat. The PNAs can be used to target  
 CC RNA and single stranded DNA (ssDNA) to produce antisense-type gene  
 CC regulation moieties. They have utility as gene-targeted drugs for  
 CC modulating HIV processes. Hence they can be used to treat AIDS and other  
 CC viral infections. They are also useful in diagnostic applications and as  
 CC research tools. PNA oligomers have high affinity for complementary single  
 CC stranded DNA. They are also able to form triple helices in which a first  
 CC PNA strand binds with RNA or ssDNA and a second PNA strand binds with the  
 CC resulting double helix or with the first PNA strand. The PNAs possess no  
 CC significant charge and are water soluble, which facilitates cellular

CC uptake. Further, since they contain amides of non-biological amino acids, they are biostable and resistant to enzymatic degradation by proteases. CC The present sequence is a specifically claimed PNA sequence (represented CC by the sequence of nucleobases) targetting HIV genes. (Updated on 25-MAR-2003 to correct PN field.)

XX  
SQ Sequence 25 BP; 0 A; 0 C; 17 G; 8 T; 0 U; 0 Other;

Query Match 0.8%; Score 18.2; DB 1; Length 25;  
Best Local Similarity 87.0%; Pred.No. 53;  
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1244 CCTCCGACCCCATCCCAACCCC 1266

Db 25 CCCCCAACCCCAACCCCAACCCC 3

## RESULT 16

AAT87450/c

ID AAT87450 standard; DNA; 18 BP.

XX

AC AAT87450;

DT 25-MAR-2003 (revised)

DT 13-JAN-1998 (first entry)

XX p55 extracellular domain 3' oligonucleotide primer.

XX TNF; tumour necrosis factor; Crohn's disease; cA2 antibody; ss.

XX Synthetic.

XX US5656272-A.

PN 12-AUG-1997.

PD 04-FEB-1994;

XX 94US-00192102.

XX 18-MAR-1991;

XX 91US-00670827.

XX 18-MAR-1992;

XX 92US-00853606.

XX 11-SEP-1992;

XX 92US-00943852.

XX 26-JAN-1993;

XX 93US-00010406.

XX 02-FEB-1993;

XX 93US-00013413.

XX (CENZ ) CENTOCOR INC.

XX (UYNY-) UNIV NEW YORK MEDICAL CENT.

XX Dadonna P, Le J, Ghayeb J, Knight D, Siegel SA, Vilcek J;

XX WPI; 1997-414547/38.

XX Treatment of Crohn's disease - by administering humanised cA2 antibody

XX specific for tumour necrosis factor.

XX Example 24; Col 95/96; 87pp; English.

XX Example 24 describes the p55 fusion protein structure. The fused genes

XX included the promoter and leader peptide coding sequence of a highly

XX expressed chimeric mouse-human antibody on the 5' side of the TNF

XX receptor insert, and codons for eight amino acids of human J sequence

XX (AAW28533 or AAW28534) and a genomic fragment encoding all three constant

XX domains of IgG1 on the 3' side of the receptor insert positions. (Updated

XX on 25-MAR-2003 to correct PF field.)

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## RESULT 17

AAV03624/c

ID AAV03624 standard; cDNA; 18 BP.

XX

AC AAV03624;

XX

DT 02-APR-1998 (first entry)

DE

DE 3' primer for p55 used in construction of chimeric anti-TNF Ab.

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RESULT 18
AAZ81714/c
ID AAZ81714 standard; cDNA; 18 BP.
XX
AC AAZ81714;
XX
DT 27-AUG-1999 (first entry)
XX
DE Primer used to construct the chimeric antibody of the invention.
XX
KW Human tumour necrosis factor-alpha; TNF-alpha; immune disease;
KW TNF-alpha mediated disease; anti-TNF chimeric antibody;
KW monoclonal antibody cA2; autoimmune disease; inflammatory disease;
KW neurodegenerative disorder; cerebellar cortical degeneration;
KW multiple system degeneration; multi-system disorder; Senile Dementia;
KW amyotrophic lateral sclerosis; spinal muscular atrophy; PCR primer;
KW Alzheimer's disease; Down's Syndrome; Diffuse Lewy body disease;
KW Wernicke-Korsakoff syndrome; chronic alcoholism;
KW lymphoma Creutzfeldt-Jakob disease;
KW sub-acute sclerosing panencephalitis; Hallerorden-Spatz disease;
KW dementia pugilistica; leukemia; ss.
XX
OS Synthetic.
XX
PN US5919452-A.
XX
PD 06-JUL-1999.
XX
PF 04-FEB-1994; 94US-00192861.
XX
PR 18-MAR-1991; 91US-00670827.
PR 18-MAR-1992; 92US-00853606.
PR 11-SEP-1992; 92US-00943852.
PR 29-JAN-1993; 93US-00010406.
PR 02-FEB-1993; 93US-00013413.
XX
PA (GENZ ) CENTOCOR INC.
PA (UYN ) UNIV NEW YORK STATE.
XX
PI Dadonna P, Le J, Ghayeb J, Knight D, Seigal S, Vilcek J;
XX
DR WPI; 1999-403943/34.
XX
PT Treatment of tumor necrosis factor-alpha mediated disease using chimeric
PT antibodies.
XX
PS Example 24; Col 84; 90pp; English.
XX
CC The present PCR primer was used to construct a chimeric antibody for use
CC in the method of the invention. The specification describes a method for
CC treating tumor necrosis factor-alpha (TNF-alpha) mediated disease (not
CC resulting from infection) using an anti-TNF chimeric antibody that
CC inhibits the binding of TNF to monoclonal antibody cA2. The methods and
CC chimeric antibodies are useful for treating and/or diagnosing TNF-alpha
CC mediated diseases such as immune and autoimmune pathologies e.g.
CC rheumatoid arthritis and especially systemic lupus erythematosus (SLE),
CC thyroiodosis, graft versus host disease, scleroderma, diabetes mellitus,
CC and Graves' disease; inflammatory diseases (other than septic shock),
CC neurodegenerative disorders, cerebellar cortical degenerations, multiple
CC systems degenerations (e.g. Mancel, Dejerine-Thomas, Shi-Drager, and
CC Machado-Joseph), Rettum's disease, abetalipoproteinemia, ataxia,
CC telangiectasia, mitochondrial multi-system disorder, amyotrophic lateral
CC sclerosis, infantile and juvenile spinal muscular atrophy, Alzheimer's
CC disease, Down's Syndrome in middle age, Diffuse Lewy body disease, Senile
CC Dementia of Lewy body type, Wernicke-Korsakoff syndrome, chronic
CC alcoholism, Creutzfeldt-Jakob disease, sub-acute sclerosing
CC panencephalitis, Hallerorden-Spatz disease, dementia pugilistica,
CC leukemias, lymphomas, other TNF-secreting tumors or alcohol-induced
CC hepatitis
XX
SQ Sequence 18 BP; 6 A; 3 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 835 TTGTGCTACCCAGATT 852
DB 18 TTGTGCTACCCAGATT 1

RESULT 19
AAZ48535/c
ID AAZ48535 standard; DNA; 18 BP.
XX
AC AAZ48535;
XX
DT 31-MAR-2000 (first entry)
XX
DE Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18928.
XX
KW Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;
KW inflammation; tumour formation; TNFR1; anticancer; ss.
XX
OS Synthetic.
XX
OS Homo sapiens.
XX
PN US6007995-A.
XX
PD 28-DEC-1999.
XX
PF 26-JUN-1998; 98US-00106038.
XX
PR 26-JUN-1998; 98US-00106038.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Baker BF, Cowser LM;
XX
DR WPI; 2000-105333/09.
XX
PT Antisense inhibition of tumor necrosis factor type 1 expression for
PT diagnosis, treatment and prevention of disease, particularly tumors.
XX
PS Example 10; Col 25; 34pp; English.
XX
CC The invention provides antisense compounds targeted to human tumour
CC necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds
CC can be used in a method of inhibiting the expression of TNFR1 human cells
CC or tissues. The antisense compounds specifically hybridize with one or
CC more nucleic acids encoding TNFR1 modulating the function of nucleic acid
CC molecules encoding TNFR1, ultimately modulating the amount of TNFR1
CC produced. The antisense compounds and method are useful as research
CC reagents and diagnostics, and in the treatment and prophylaxis of
CC infection, inflammation or tumour formation. Sequences AAZ48482-565
CC represent antisense oligos used for inhibition of the human TNFR1 mRNA
XX
SQ Sequence 18 BP; 3 A; 4 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1033 GAAGGAAGTACTACTAAG 1050
DB 18 GAAGGAAGTACTACTAAG 1

RESULT 20
AAZ48525/c
ID AAZ48525 standard; DNA; 18 BP.
XX
AC AAZ48525;
XX

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CC or tissues. The antisense compounds specifically hybridize with one or  
 CC more nucleic acids encoding TNFR1 modulating the function of nucleic acid  
 CC molecules encoding TNFR1, ultimately modulating the amount of TNFR1  
 CC produced. The antisense compounds and method are useful as research  
 CC reagents and diagnostics, and in the treatment and prophylaxis of  
 CC infection, inflammation or tumour formation. Sequences AAZ48482-565  
 CC represent antisense oligos used for inhibition of the human TNFR1 mRNA  
 XX  
 SQ Sequence 18 BP; 6 A; 6 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 20;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 786 CGAGTGTCTCTCTGTAG 803  
 DB 18 CGAGTGTCTCTCTGTAG 1

RESULT 23  
 AAZ48524/C  
 ID AAZ48524 standard; DNA; 18 BP.  
 XX AC AAZ48524;  
 XX DT 31-MAR-2000 (first entry)  
 XX DE Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18917.  
 XX KW Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;  
 XX KW inflammation; tumour formation; TNFR1; anticancer; ss.  
 XX OS Synthetic.  
 XX OS Homo sapiens.  
 XX PN US6007995-A.  
 XX PD 28-DEC-1999.  
 XX PF 26-JUN-1998; 98US-00106038.  
 XX PR 26-JUN-1998; 98US-00106038.  
 XX PA (ISIS-) ISIS PHARM INC.  
 XX PI Baker BF, Cowser LM;  
 XX PS WPI; 2000-105333/09.  
 XX PT Antisense inhibition of tumor necrosis factor type 1 expression for  
 XX PT diagnosis, treatment and prevention of disease, particularly tumors.  
 XX PS Claim 1; Col 25; 34pp; English.

CC The invention provides antisense compounds targeted to human tumour  
 CC necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds  
 CC can be used in a method of inhibiting the expression of TNFR1 human cells  
 CC or tissues. The antisense compounds specifically hybridize with one or  
 CC more nucleic acids encoding TNFR1 modulating the function of nucleic acid  
 CC molecules encoding TNFR1, ultimately modulating the amount of TNFR1  
 CC produced. The antisense compounds and method are useful as research  
 CC reagents and diagnostics, and in the treatment and prophylaxis of  
 CC infection, inflammation or tumour formation. Sequences AAZ48482-565  
 CC represent antisense oligos used for inhibition of the human TNFR1 mRNA  
 XX  
 SQ Sequence 18 BP; 3 A; 4 C; 2 G; 9 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 20;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 802 AGTAACGTGAAGAAAGC 819  
 DB 18 AGTAACGTGAAGAAAGC 1

RESULT 24  
 AAZ48528/c  
 ID AAZ48528 standard; DNA; 18 BP.  
 XX AC AAZ48528;  
 XX DT 31-MAR-2000 (first entry)  
 XX DE Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18921.  
 XX KW Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;  
 XX KW inflammation; tumour formation; TNFR1; anticancer; ss.  
 XX OS Synthetic.  
 XX OS Homo sapiens.  
 XX PN US6007995-A.  
 XX PD 28-DEC-1999.  
 XX PF 26-JUN-1998; 98US-00106038.  
 XX PR 26-JUN-1998; 98US-00106038.  
 XX PA (ISIS-) ISIS PHARM INC.  
 XX PI Baker BF, Cowser LM;  
 XX PS WPI; 2000-105333/09.  
 XX PT Antisense inhibition of tumor necrosis factor type 1 expression for  
 XX PT diagnosis, treatment and prevention of disease, particularly tumors.  
 XX PS Example 10; Col 25; 34pp; English.

CC The invention provides antisense compounds targeted to human tumour  
 CC necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds  
 CC can be used in a method of inhibiting the expression of TNFR1 human cells  
 CC or tissues. The antisense compounds specifically hybridize with one or  
 CC more nucleic acids encoding TNFR1 modulating the function of nucleic acid  
 CC molecules encoding TNFR1, ultimately modulating the amount of TNFR1  
 CC produced. The antisense compounds and method are useful as research  
 CC reagents and diagnostics, and in the treatment and prophylaxis of  
 CC infection, inflammation or tumour formation. Sequences AAZ48482-565  
 CC represent antisense oligos used for inhibition of the human TNFR1 mRNA  
 XX  
 SQ Sequence 18 BP; 11 A; 3 C; 3 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 20;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 906 CATTTCCTTGGTCCTTGG 923  
 DB 18 CATTTCCTTGGTCCTTGG 1

RESULT 25  
 AAZ48537/c  
 ID AAZ48537 standard; DNA; 18 BP.  
 XX AC AAZ48537;  
 XX DT 31-MAR-2000 (first entry)  
 XX DE Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18930.  
 XX KW Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;  
 XX KW inflammation; tumour formation; TNFR1; anticancer; ss.  
 XX









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QY      873 GGACTCAGGACACACAGT 890
Db      18 GGACTCAGGACACACAGT 1

RESULT 33
AAZ48532/c
ID AAZ48532 standard; DNA; 18 BP.
XX
AC AAZ48532;
XX
DT 31-MAR-2000 (first entry)
XX
DE Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18925.
XX
KW Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;
KW inflammation; tumour formation; TNFR1; anticancer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN US6007995-A.
XX
PD 28-DEC-1999.
XX
PF 26-JUN-1998; 98US-00106038.
XX
PR 26-JUN-1998; 98US-00106038.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Baker BF, Cowseert LM;
XX
DR WPI; 2000-105333/09.
XX
PT Antisense inhibition of tumor necrosis factor type 1 expression for
PT diagnosis, treatment and prevention of disease, particularly tumors.
XX
PS Example 10; Col 25; 34pp; English.
XX
CC The invention provides antisense compounds targeted to human tumour
CC necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds
CC can be used in a method of inhibiting the expression of TNFR1 human cells
CC or tissues. The antisense compounds specifically hybridize with one or
CC more nucleic acids encoding TNFR1 modulating the function of nucleic acid
CC molecules encoding TNFR1, ultimately modulating the amount of TNFR1
CC produced. The antisense compounds and method are useful as research
CC reagents and diagnostics, and in the treatment and prophylaxis of
CC infection, inflammation or tumour formation. Sequences AAZ48482-565
CC represent antisense oligos used for inhibition of the human TNFR1 mRNA
XX
SQ Sequence 18 BP; 9 A; 2 C; 4 G; 3 T; 0 U; 0 Other;
XX
PT Antisense inhibition of tumor necrosis factor type 1 expression for
PT diagnosis, treatment and prevention of disease, particularly tumors.
XX
PS Example 10; Col 25; 34pp; English.
XX
CC The invention provides antisense compounds targeted to human tumour
CC necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds
CC can be used in a method of inhibiting the expression of TNFR1 human cells
CC or tissues. The antisense compounds specifically hybridize with one or
CC more nucleic acids encoding TNFR1 modulating the function of nucleic acid
CC molecules encoding TNFR1, ultimately modulating the amount of TNFR1
CC produced. The antisense compounds and method are useful as research
CC reagents and diagnostics, and in the treatment and prophylaxis of
CC infection, inflammation or tumour formation. Sequences AAZ48482-565
CC represent antisense oligos used for inhibition of the human TNFR1 mRNA
XX
SQ Sequence 18 BP; 9 A; 2 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      935 TCCTCTTCATGTGTTAA 952
Db      18 TCCTCTTCATGTGTTAA 1

RESULT 34
AAZ48526/c
ID AAZ48526 standard; DNA; 18 BP.
XX
AC AAZ48526;
XX
DT 31-MAR-2000 (first entry)
XX
DE Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18919.
XX
KW Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;

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KW inflammation; tumour formation; TNFR1; anticancer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN US6007995-A.
XX
PD 28-DEC-1999.
XX
PF 26-JUN-1998; 98US-00106038.
XX
PR 26-JUN-1998; 98US-00106038.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Baker BF, Cowseert LM;
XX
DR WPI; 2000-105333/09.
XX
PT Antisense inhibition of tumor necrosis factor type 1 expression for
PT diagnosis, treatment and prevention of disease, particularly tumors.
XX
PS Example 10; Col 25; 34pp; English.
XX
CC The invention provides antisense compounds targeted to human tumour
CC necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds
CC can be used in a method of inhibiting the expression of TNFR1 human cells
CC or tissues. The antisense compounds specifically hybridize with one or
CC more nucleic acids encoding TNFR1 modulating the function of nucleic acid
CC molecules encoding TNFR1, ultimately modulating the amount of TNFR1
CC produced. The antisense compounds and method are useful as research
CC reagents and diagnostics, and in the treatment and prophylaxis of
CC infection, inflammation or tumour formation. Sequences AAZ48482-565
CC represent antisense oligos used for inhibition of the human TNFR1 mRNA
XX
SQ Sequence 18 BP; 5 A; 4 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      845 CCCAGATTGAGAATGTTA 862
Db      18 CCCAGATTGAGAATGTTA 1

RESULT 35
AAZ48529/c
ID AAZ48529 standard; DNA; 18 BP.
XX
AC AAZ48529;
XX
DT 31-MAR-2000 (first entry)
XX
DE Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18922.
XX
KW Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;
KW inflammation; tumour formation; TNFR1; anticancer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN US6007995-A.
XX
PD 28-DEC-1999.
XX
PF 26-JUN-1998; 98US-00106038.
XX
PR 26-JUN-1998; 98US-00106038.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Baker BF, Cowseert LM;

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XX DR WPI; 2000-105333/09.
XX
XX Antisense inhibition of tumor necrosis factor type 1 expression for
XX diagnosis, treatment and prevention of disease, particularly tumors.
XX
XX Example 10; Col 25; 34pp; English.
XX
XX The invention provides antisense compounds targeted to human tumour
XX necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds
XX can be used in a method of inhibiting the expression of TNFR1 human cells
XX or tissues. The antisense compounds specifically hybridize with one or
XX more nucleic acids encoding TNFR1 modulating the function of nucleic acid
XX molecules encoding TNFR1, ultimately modulating the amount of TNFR1
XX produced. The antisense compounds and method are useful as research
XX reagents and diagnostics, and in the treatment and prophylaxis of
XX infection, inflammation or tumour formation. Sequences AAZ48482-565
XX represent antisense oligos used for inhibition of the human TNFR1 mRNA
XX
XX Sequence 18 BP; 11 A; 3 C; 4 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 18; DB 1; Length 18;
XX Best Local Similarity 100.0%; Pred. No. 20;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 911 TCCTTTGGCTCTTGGCTTT 928
XX 18 TCCTTTGGCTCTTGGCTTT 1
XX
XX RESULT 36
XX AAZ48543/C
XX ID AAZ48543 standard; DNA; 18 BP.
XX AC AAZ48543;
XX
XX 31-MAR-2000 (first entry)
XX
XX Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18936.
XX
XX Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;
XX inflammation; tumour formation; TNFR1; anticancer; ss.
XX
XX Synthetic.
XX OS Homo sapiens.
XX
XX US6007995-A.
XX
XX 28-DEC-1999.
XX
XX 26-JUN-1998; 98US-00106038.
XX
XX 26-JUN-1998; 98US-00106038.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Baker BF, Cowsett LM;
XX
XX WPI; 2000-105333/09.
XX
XX Antisense inhibition of tumor necrosis factor type 1 expression for
XX diagnosis, treatment and prevention of disease, particularly tumors.
XX
XX Example 10; Col 25; 34pp; English.
XX
XX The invention provides antisense compounds targeted to human tumour
XX necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds
XX can be used in a method of inhibiting the expression of TNFR1 human cells
XX or tissues. The antisense compounds specifically hybridize with one or
XX more nucleic acids encoding TNFR1 modulating the function of nucleic acid
XX molecules encoding TNFR1, ultimately modulating the amount of TNFR1
XX produced. The antisense compounds and method are useful as research
XX reagents and diagnostics, and in the treatment and prophylaxis of
XX infection, inflammation or tumour formation. Sequences AAZ48482-565
XX represent antisense oligos used for inhibition of the human TNFR1 mRNA
XX
```

```
CC infection, inflammation or tumour formation. Sequences AAZ48482-565
CC represent antisense oligos used for inhibition of the human TNFR1 mRNA
XX
XX Sequence 18 BP; 2 A; 8 C; 2 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 18; DB 1; Length 18;
XX Best Local Similarity 100.0%; Pred. No. 20;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 1269 TCAGAACTGGGAGGACAG 1286
XX 18 TCAGAACTGGGAGGACAG 1
XX
XX RESULT 37
XX AAZ48523/C
XX ID AAZ48523 standard; DNA; 18 BP.
XX AC AAZ48523;
XX
XX 31-MAR-2000 (first entry)
XX
XX Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18916.
XX
XX Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;
XX inflammation; tumour formation; TNFR1; anticancer; ss.
XX
XX Synthetic.
XX OS Homo sapiens.
XX
XX US6007995-A.
XX
XX 28-DEC-1999.
XX
XX 26-JUN-1998; 98US-00106038.
XX
XX 26-JUN-1998; 98US-00106038.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Baker BF, Cowsett LM;
XX
XX WPI; 2000-105333/09.
XX
XX Antisense inhibition of tumor necrosis factor type 1 expression for
XX diagnosis, treatment and prevention of disease, particularly tumors.
XX
XX Example 10; Col 25; 34pp; English.
XX
XX The invention provides antisense compounds targeted to human tumour
XX necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds
XX can be used in a method of inhibiting the expression of TNFR1 human cells
XX or tissues. The antisense compounds specifically hybridize with one or
XX more nucleic acids encoding TNFR1 modulating the function of nucleic acid
XX molecules encoding TNFR1, ultimately modulating the amount of TNFR1
XX produced. The antisense compounds and method are useful as research
XX reagents and diagnostics, and in the treatment and prophylaxis of
XX infection, inflammation or tumour formation. Sequences AAZ48482-565
XX represent antisense oligos used for inhibition of the human TNFR1 mRNA
XX
XX Sequence 18 BP; 6 A; 4 C; 3 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 18; DB 1; Length 18;
XX Best Local Similarity 100.0%; Pred. No. 20;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 796 TCCTGTAGTACTGTAAG 813
XX 18 TCCTGTAGTACTGTAAG 1
XX
XX RESULT 38
XX AAZ48536/C
```



XX The invention provides antisense compounds targeted to human tumour  
 CC necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds  
 CC can be used in a method of inhibiting the expression of TNFR1 human cells  
 CC or tissues. The antisense compounds specifically hybridize with one or  
 CC more nucleic acids encoding TNFR1 modulating the function of nucleic acid  
 CC molecules encoding TNFR1, ultimately modulating the amount of TNFR1  
 CC produced. The antisense compounds and method are useful as research  
 CC reagents and diagnostics, and in the treatment and prophylaxis of  
 CC infection, inflammation or tumour formation. Sequences AAZ48482-565  
 CC represent antisense oligos used for inhibition of the human TNFR1 mRNA  
 XX  
 SQ Sequence 18 BP; 1 A; 5 C; 4 G; 8 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 20;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 732 GGAGAAACAGACACCGT 749  
 Db 18 GGAGAAACAGACACCGT 1

RESULT 41  
 AAZ48531/c  
 ID AAZ48531 standard; DNA; 18 BP.  
 XX  
 AC AAZ48531;  
 XX  
 DT 31-MAR-2000 (first entry)  
 XX  
 DE Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18924.  
 XX  
 KW Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;  
 KW inflammation; tumour formation; TNFR1; anticancer; ss.  
 OS Synthetic.  
 OS Homo sapiens.  
 XX  
 PN US6007995-A.  
 XX  
 PD 28-DEC-1999.  
 XX  
 PF 26-JUN-1998; 98US-00106038.  
 XX  
 PR 26-JUN-1998; 98US-00106038.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Baker BF, Cowsett LM;  
 XX  
 DR WPI; 2000-105333/09.  
 XX  
 PT Antisense inhibition of tumor necrosis factor type 1 expression for  
 PT diagnosis, treatment and prevention of disease, particularly tumors.  
 XX  
 PS Example 10; Col 25; 34pp; English.

The invention provides antisense compounds targeted to human tumour  
 CC necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds  
 CC can be used in a method of inhibiting the expression of TNFR1 human cells  
 CC or tissues. The antisense compounds specifically hybridize with one or  
 CC more nucleic acids encoding TNFR1 modulating the function of nucleic acid  
 CC molecules encoding TNFR1, ultimately modulating the amount of TNFR1  
 CC produced. The antisense compounds and method are useful as research  
 CC reagents and diagnostics, and in the treatment and prophylaxis of  
 CC infection, inflammation or tumour formation. Sequences AAZ48482-565  
 CC represent antisense oligos used for inhibition of the human TNFR1 mRNA  
 XX  
 SQ Sequence 18 BP; 8 A; 1 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 20;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 732 GGAGAAACAGACACCGT 749  
 Db 18 GGAGAAACAGACACCGT 1

RESULT 42  
 AAZ48530/c  
 ID AAZ48530 standard; DNA; 18 BP.  
 XX  
 AC AAZ48530;  
 XX  
 DT 31-MAR-2000 (first entry)  
 XX  
 DE Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18923.  
 XX  
 KW Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;  
 KW inflammation; tumour formation; TNFR1; anticancer; ss.  
 OS Synthetic.  
 OS Homo sapiens.  
 XX  
 PN US6007995-A.  
 XX  
 PD 28-DEC-1999.  
 XX  
 PF 26-JUN-1998; 98US-00106038.  
 XX  
 PR 26-JUN-1998; 98US-00106038.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Baker BF, Cowsett LM;  
 XX  
 DR WPI; 2000-105333/09.  
 XX  
 PT Antisense inhibition of tumor necrosis factor type 1 expression for  
 PT diagnosis, treatment and prevention of disease, particularly tumors.  
 XX  
 PS Example 10; Col 25; 34pp; English.

The invention provides antisense compounds targeted to human tumour  
 CC necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds  
 CC can be used in a method of inhibiting the expression of TNFR1 human cells  
 CC or tissues. The antisense compounds specifically hybridize with one or  
 CC more nucleic acids encoding TNFR1 modulating the function of nucleic acid  
 CC molecules encoding TNFR1, ultimately modulating the amount of TNFR1  
 CC produced. The antisense compounds and method are useful as research  
 CC reagents and diagnostics, and in the treatment and prophylaxis of  
 CC infection, inflammation or tumour formation. Sequences AAZ48482-565  
 CC represent antisense oligos used for inhibition of the human TNFR1 mRNA  
 XX  
 SQ Sequence 18 BP; 9 A; 1 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 20;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 929 TATCCCTCTCTCAATTG 946  
 Db 18 TATCCCTCTCTCAATTG 1

RESULT 43  
 AAZ485708/c  
 ID AAZ485708 standard; DNA; 18 BP.  
 XX  
 AC AAZ485708;  
 XX  
 DT 03-JAN-2002 (first entry)  
 XX  
 DE PCR primer used to amplify p55 extracellular domain DNA.

Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 929 TATCCCTCTCTCAATTG 946  
 Db 18 TATCCCTCTCTCAATTG 1

RESULT 42  
 AAZ48530/c  
 ID AAZ48530 standard; DNA; 18 BP.  
 XX  
 AC AAZ48530;  
 XX  
 DT 31-MAR-2000 (first entry)  
 XX  
 DE Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18923.  
 XX  
 KW Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;  
 KW inflammation; tumour formation; TNFR1; anticancer; ss.  
 OS Synthetic.  
 OS Homo sapiens.  
 XX  
 PN US6007995-A.  
 XX  
 PD 28-DEC-1999.  
 XX  
 PF 26-JUN-1998; 98US-00106038.  
 XX  
 PR 26-JUN-1998; 98US-00106038.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Baker BF, Cowsett LM;  
 XX  
 DR WPI; 2000-105333/09.  
 XX  
 PT Antisense inhibition of tumor necrosis factor type 1 expression for  
 PT diagnosis, treatment and prevention of disease, particularly tumors.  
 XX  
 PS Example 10; Col 25; 34pp; English.

The invention provides antisense compounds targeted to human tumour  
 CC necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds  
 CC can be used in a method of inhibiting the expression of TNFR1 human cells  
 CC or tissues. The antisense compounds specifically hybridize with one or  
 CC more nucleic acids encoding TNFR1 modulating the function of nucleic acid  
 CC molecules encoding TNFR1, ultimately modulating the amount of TNFR1  
 CC produced. The antisense compounds and method are useful as research  
 CC reagents and diagnostics, and in the treatment and prophylaxis of  
 CC infection, inflammation or tumour formation. Sequences AAZ48482-565  
 CC represent antisense oligos used for inhibition of the human TNFR1 mRNA  
 XX  
 SQ Sequence 18 BP; 9 A; 1 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 20;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 921 TTGCCCTTTATCCCTCT 938  
 Db 18 TTGCCCTTTATCCCTCT 1

RESULT 43  
 AAZ485708/c  
 ID AAZ485708 standard; DNA; 18 BP.  
 XX  
 AC AAZ485708;  
 XX  
 DT 03-JAN-2002 (first entry)  
 XX  
 DE PCR primer used to amplify p55 extracellular domain DNA.

XX Human; tumour necrosis factor-alpha; TNF-alpha; chimeric antibody;  
 KW immunoglobulin; inflammation; cancer; cachexia; sepsis; endotoxemic shock;  
 KW infection; chronic inflammatory disease; auto-immune disease; malignancy;  
 KW neurodegenerative disease; Crohn's disease; rheumatoid arthritis;  
 KW vascular endothelial growth factor; VEGF; VEGF-mediated disease;  
 KW PCR primer; ss.  
 XX Unidentified.  
 XX OS  
 XX US2001027249-A1.  
 XX PD 04-OCT-2001.  
 XX PF 08-JAN-2001; 2001US-00756301.  
 XX PR 18-MAR-1991; 91US-00670827.  
 PR 18-MAR-1992; 92US-00853606.  
 PR 11-SEP-1992; 92US-00943852.  
 PR 29-JAN-1993; 93US-00104006.  
 PR 02-FEB-1993; 93US-00013413.  
 PR 04-FEB-1994; 94US-00192093.  
 PR 04-FEB-1994; 94US-00192102.  
 PR 04-FEB-1994; 94US-00192861.  
 PR 18-OCT-1994; 94US-00324799.  
 PR 11-DEC-1995; 95US-00570674.  
 PR 12-AUG-1998; 98US-00133119.  
 XX (CENZ ) CENTOCOR INC.  
 PA  
 PA Le J, Vilcek J, Daddona P, Ghraeyeb J, Knight D, Siegel S;  
 XX WPI; 2001-615872/71.  
 XX DR  
 XX PT New chimeric antibody binding an epitope specific for human tumor  
 PT necrosis factor alpha useful in treatment and diagnosis of tumor necrosis  
 PT factor alpha related conditions e.g. Crohn's disease.  
 XX PS Example 26; Page 51; 93pp; English.  
 XX CC PCR primers A165707-08 were used to amplify DNA encoding the  
 CC extracellular domain of p55. The amplified fragment was used to produce  
 CC p55 and Ig fusion proteins, in the course of the invention. The  
 CC specification describes chimeric antibodies which bind to epitopes of  
 CC human tumour necrosis factor (TNF)-alpha. Chimeric antibodies of the  
 CC invention comprise at least part of a human immunoglobulin constant  
 CC region and at least part of a non-human immunoglobulin variable region.  
 CC The chimeric antibodies are useful in vivo diagnosis and therapy of TNF-  
 CC alpha-mediated pathologies and conditions. They can also neutralize human  
 CC TNF-alpha under physiological conditions. This is useful as TNF is known  
 CC to be involved in e.g. pro-inflammatory actions, wasting associated with  
 CC cancer and other diseases (cachexia), gram-negative sepsis and endotoxemic  
 CC shock. Antibodies can be used to treat and/or diagnose bacterial,  
 CC parasitic or viral infections, chronic inflammatory diseases, auto-immune  
 CC diseases, malignancies and neurodegenerative diseases (such as Crohn's  
 CC disease and rheumatoid arthritis). As inhibition or antagonism of TNF  
 CC also decreases the expression of vascular endothelial growth factor  
 CC (VEGF), the antibodies are also useful to treat VEGF-mediated diseases  
 XX  
 XX SQ Sequence 18 BP; 6 A; 3 C; 6 G; 3 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 18; DB 1; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 20;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 835 TTGTGCTACCCAGATT 852  
 Db 18 TTGTGCTACCCAGATT 1  
 RESULT 44  
 AAD18201/c  
 ID AAD18201 standard; DNA; 18 BP.

XX AAD18201;  
 XX 18-DEC-2001 (first entry)  
 XX p55 heavy chain fusion DNA construct amplifying primer #2.  
 XX Human; tumour necrosis factor; antifungal; antiviral; leukaemia;  
 KW antiparasitic; immune disorder; autoimmune disorder; infection;  
 KW systemic lupus erythematosus; rheumatoid arthritis; antibacterial;  
 KW inflammatory disease; ulcerative colitis; neurodegenerative disease;  
 KW multiple sclerosis; cerebellar disorder; alcohol-induced hepatitis;  
 KW lymphoma; mouse; anti-TNF antibody; light chain variable region;  
 KW chimeric; TNF alpha; PCR primer; ss.  
 XX Unidentified.  
 XX OS  
 XX US6284471-B1.  
 XX PD 04-SEP-2001.  
 XX PF 04-FEB-1994; 94US-00192093.  
 XX PR 18-MAR-1991; 91US-00670827.  
 PR 18-MAR-1992; 92US-00853606.  
 PR 11-SEP-1992; 92US-00943852.  
 PR 29-JAN-1993; 93US-00104006.  
 PR 02-FEB-1993; 93US-00013413.  
 XX (UYNY-) UNIV NEW YORK MEDICAL CENT.  
 PA (CENZ ) CENTOCOR INC.  
 PA Le J, Vilcek J, Daddona P, Ghraeyeb J, Knight D, Siegel SA;  
 XX WPI; 2001-595467/57.  
 XX DR Chimeric anti-tumor necrosis factor (TNF) antibodies useful for  
 PT diagnosing or treating TNF-associated pathologies or conditions, e.g.  
 PT chronic and acute immune, autoimmune disorders, and microbial infections.  
 XX PS Example 24; Col 82; 87pp; English.  
 XX CC The invention relates to chimeric anti-tumour necrosis factor (TNF)  
 CC antibodies. These chimeric antibodies comprises two light chains and two  
 CC heavy chains, each of the chains comprising at least part of a human Ig  
 CC immunoglobulin (Ig) constant region and at least part of a non-human Ig  
 CC variable region, where the antibodies are capable of binding an epitope  
 CC specific for human TNF-alpha. Anti-TNF antibodies or peptides may be used  
 CC in research, therapeutic and diagnostic methods, specifically for  
 CC diagnosing and/or treating animals or human having pathologies or  
 CC conditions associated with the presence of a substance reactive with an  
 CC anti-TNF antibody. TNF-related pathologies include acute and chronic  
 CC immune and autoimmune disorders (e.g. systemic lupus erythematosus,  
 CC rheumatoid arthritis), infections (e.g. bacterial, viral, fungal or  
 CC parasitic infections), inflammatory diseases (e.g. ulcerative colitis,  
 CC Crohn's pathology), neurodegenerative diseases (e.g. multiple sclerosis,  
 CC chorea or senile chorea, disorders of the basal ganglia or cerebellar  
 CC disorders), malignant pathologies (e.g. leukaemia, lymphomas), or alcohol  
 CC -induced hepatitis. The anti-TNF peptide or antibodies may also be used  
 CC for immunoassays, which detect or quantitate TNF or anti-TNF antibodies.  
 CC The present sequence is a PCR primer used to amplify p55 TNF receptor  
 CC heavy chain fusion DNA construct  
 XX SQ Sequence 18 BP; 6 A; 3 C; 6 G; 3 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 18; DB 1; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 20;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 835 TTGTGCTACCCAGATT 852  
 Db 18 TTGTGCTACCCAGATT 1

RESULT 45  
AAH78601/c  
ID AAH78601 standard; DNA; 18 BP.  
XX  
AC AAH78601;  
XX  
DT 10-DEC-2001 (first entry)  
XX  
XX  
PCR primer used to amplify DNA encoding p55 extracellular domain.  
XX  
DE Human; tumour necrosis factor; TNF; anti-TNF antibody; infection; sepsis;  
XX cachexia; acquired immunodeficiency syndrome; AIDS; septic shock;  
KW chronic inflammatory disease; disseminated intravascular coagulation;  
KW atherosclerosis; ulcerative colitis; chronic inflammatory bowel disease;  
KW autoimmune disease; rheumatoid arthritis; diabetes mellitus;  
KW graft versus host disease; Grave's disease; alcohol-induced hepatitis;  
KW malignancy; neurodegenerative disease; multiple sclerosis;  
KW demyelinating disease; acute transverse myelitis; p55;  
KW vascular endothelial growth factor-mediated disease;  
KW VEGF-mediated disease; PCR primer; ss.  
XX  
XX Unidentified.  
XX  
XX US6277969-B1.  
XX  
XX 21-AUG-2001.  
XX  
XX 12-AUG-1998; 98US-00133119.  
XX  
XX 18-MAR-1991; 91US-00670827.  
PR 18-MAR-1992; 92US-00853606.  
PR 11-SEP-1992; 92US-00943852.  
PR 29-JAN-1993; 93US-00010406.  
PR 02-FEB-1993; 93US-00013413.  
PR 04-FEB-1994; 94US-00192093.  
PR 04-FEB-1994; 94US-00192102.  
PR 04-FEB-1994; 94US-00192861.  
PR 18-OCT-1994; 94US-00324799.  
PR 11-DEC-1995; 95US-00570674.  
XX  
XX (UNY ) UNIV NEW YORK STATE.  
PA (CENZ ) CENTOCOR INC.  
PA (UNY-) UNIV NEW YORK MEDICAL CENT.  
XX  
PI Le J, Vilcek J, Daddona P, Ghayeb J, Knight D, Siegel S;  
XX  
XX WPI; 2001-588928/66.  
XX  
XX New nucleic acid molecule encoding heavy or light chain variable regions  
XX of anti-tumor necrosis factor antibody, useful for alleviating symptoms  
XX or pathologies involving tumor necrosis factor.  
XX  
XX Example 26; Col 92; 94pp; English.  
XX  
XX The specification describes anti-tumour necrosis factor (TNF) antibodies.  
XX The anti-TNF antibody is useful for alleviating symptoms or pathologies  
XX involving TNF, such as bacterial, viral or parasitic infections (e.g.  
XX sepsis, cachexia, acquired immunodeficiency syndrome (AIDS) and septic  
XX shock), chronic inflammatory diseases (disseminated intravascular  
XX coagulation, atherosclerosis, ulcerative colitis and chronic inflammatory  
XX bowel disease), autoimmune diseases (e.g. rheumatoid arthritis, diabetes  
XX mellitus, graft versus host disease and Grave's disease), alcohol-induced  
XX hepatitis, malignancies and neurodegenerative diseases (e.g. multiple  
XX sclerosis, demyelinating diseases and acute transverse myelitis). The  
XX anti-TNF antibody is also useful in the treatment of vascular endothelial  
XX growth factor (VEGF)-mediated diseases. PCR primers AAH78600-01 were used  
XX to amplify DNA encoding the p55 extracellular domain. p55 is a TNF  
XX receptor, and the amplified fragment was used to construct p55/Ig fusion  
XX proteins, in the course of the invention  
XX  
XX Sequence 18 BP; 6 A; 3 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;  
Best Local Similarity 100.0%; Pred. No. 20;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 835 TTGTGCTACCCAGATT 852  
Db 18 TTGTGCTACCCAGATT 1  
RESULT 46  
ABS54265/c  
ID ABS54265 standard; DNA; 18 BP.  
XX  
AC ABS54265;  
XX  
DT 28-NOV-2002 (first entry)  
XX  
XX Human p55 heavy/light chain cDNA, PCR primer.  
XX  
XX Human; tumour necrosis factor-alpha; TNFalpha; anti-TNF antibody;  
KW anti-TNF peptide; neurodegenerative disease; multiple sclerosis;  
KW acquired immunodeficiency syndrome; AIDS; demyelinating disease;  
KW acute transverse myelitis; extrapyramidal disorder; lesion;  
KW cerebellar disorder; basal ganglia disorder; Huntington's chorea;  
KW movement disorder; senile chorea; Parkinson's disease; spinal ataxia;  
KW progressive supranuclear palsy; spinocerebellar degeneration;  
KW systemic disorder; neurogenic muscular atrophy; Down's Syndrome;  
KW amyotrophic lateral sclerosis; Alzheimer's disease; chronic alcoholism;  
KW Creutzfeldt-Jakob disease; Hallervorden-Spatz disease; neuroleptic;  
KW neurotropic; neuroprotective; antiparkinsonian; p55; heavy chain;  
KW light chain; PCR; primer; ss.  
XX  
XX Homo sapiens.  
OS Synthetic.  
XX  
XX US2002106372-A1.  
XX  
XX 08-AUG-2002.  
XX  
XX 18-JAN-2001; 2001US-00766535.  
XX  
XX 18-MAR-1991; 91US-00670827.  
PR 18-MAR-1992; 92US-00853606.  
PR 11-SEP-1992; 92US-00943852.  
PR 29-JAN-1993; 93US-00010406.  
PR 02-FEB-1993; 93US-00013413.  
PR 04-FEB-1994; 94US-00192093.  
PR 04-FEB-1994; 94US-00192102.  
PR 04-FEB-1994; 94US-00192861.  
PR 18-OCT-1994; 94US-00324799.  
PR 11-DEC-1995; 95US-00570674.  
PR 12-AUG-1998; 98US-00133119.  
XX  
XX (CENZ ) CENTOCOR INC.  
XX  
XX Le J, Vilcek J, Daddona P, Ghayeb J, Knight D, Siegel S;  
XX  
XX WPI; 2002-706216/76.  
XX  
XX Treating a neurodegenerative disease, especially multiple sclerosis,  
XX comprises administering an anti-tumor necrosis factor monoclonal antibody  
XX or its fragment.  
XX  
XX Example 26; Page 52; 95pp; English.  
XX  
XX The present invention relates to anti-tumour necrosis factor (TNF)  
XX antibodies, and anti-TNF peptides, which are specific for human tumour  
XX necrosis factor-alpha (TNFalpha). Methods of producing and using the anti-  
XX -TNF antibodies and anti-TNF peptides are also disclosed. The anti-TNF  
XX antibodies, anti-TNF peptides and methods of the invention are useful for  
XX treating human neurodegenerative diseases (e.g. multiple sclerosis,  
XX acquired immunodeficiency syndrome (AIDS) dementia complex, a  
XX demyelinating disease, acute transverse myelitis, an extrapyramidal

CC disorder, a cerebellar disorder, a lesion of the corticospinal system, a  
 CC disorder of the basal ganglia, a hyperkinetic movement disorder, a  
 CC Huntington's chorea, senile chorea, a drug-induced movement disorder, a  
 CC hypokinetic movement disorder, Parkinson's disease, progressive  
 CC supranuclear palsy, a structural lesion of the cerebellum, a  
 CC spinocerebellar degeneration, spinal ataxia, Friedreich's ataxia, a  
 CC cerebellar cortical degeneration, a multiple systems degeneration, a  
 CC systemic disorder, Refsum's disease, abetalipoproteinaemia, ataxia  
 CC telangiectasia, a mitochondrial multi-system disorder, demyelinating core  
 CC disorder, acute transverse myelitis, a disorder of the motor unit, a  
 CC neurogenic muscular atrophy, anterior horn cell degeneration, amyotrophic  
 CC lateral sclerosis, infantile spinal muscular atrophy, juvenile spinal  
 CC muscular atrophy, Alzheimer's disease, Down's Syndrome, a diffuse Lewy  
 CC body disease, senile dementia of Lewy body type, Wernicke-Korsakoff  
 CC syndrome, chronic alcoholism, Creutzfeldt-Jakob disease, subacute  
 CC sclerosing panencephalitis, Hallervorden-Spatz disease, or dementia  
 CC pugilistica). The present sequence represents a PCR primer used to  
 CC amplify human p55 heavy and light chain cDNAs in the examples of the  
 CC present invention

XX  
 SQ Sequence 18 BP; 6 A; 3 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DE 1; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 20;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 835 TTGTGCTACCCGAGATT 852

Db 18 TTGTGCTACCCGAGATT 1

RESULT 47

ABT05021/c

ID ABT05021 standard; DNA; 18 BP.

XX AC ABT05021;

XX DT 11-OCT-2002 (first entry)

XX DE TNFR1 expression modulation related antisense oligo SEQ ID No 51.

XX KW Antisense compound; tumour necrosis factor receptor 1; liver disease;  
 XX TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;  
 XX human; ds.

XX OS Homo sapiens.

XX PN WO200248168-A1.

XX PD 20-JUN-2002.

XX PF 22-OCT-2001; 2001WO-US051224.

XX PR 24-OCT-2000; 2000US-00695451.

XX PA (ISIS-) ISIS PHARM INC.

XX PI Baker BF, Cowsett LM, Zhang H, Dean NM;

XX DR WPI; 2002-583481/62.

XX The invention relates to an antisense compound 8 to 30 nucleotides in  
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor  
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of  
 CC TNFR1. The antisense compound is useful for inhibiting the expression of  
 CC TNFR1 in cells or tissues. The antisense compound is also useful for  
 CC treating an animal (preferably human) having a disease or condition

XX PS Example 10; Page 45; 121pp; English.

XX The invention relates to an antisense compound 8 to 30 nucleotides in  
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor  
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of  
 CC TNFR1. The antisense compound is useful for inhibiting the expression of  
 CC TNFR1 in cells or tissues. The antisense compound is also useful for  
 CC treating an animal (preferably human) having a disease or condition

CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver  
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting  
 CC the expression of TNFR1. The antisense compound is useful for  
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.  
 CC This polynucleotide sequence represents a human oligonucleotide relating  
 CC to the TNFR1 of the invention

XX SQ Sequence 18 BP; 3 A; 5 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DE 1; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 20;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 807 CTGTAGAAAAAGCCTGGA 824

Db 18 CTGTAGAAAAAGCCTGGA 1

RESULT 48

ABT05032/c

ID ABT05032 standard; DNA; 18 BP.

XX AC ABT05032;

XX DT 11-OCT-2002 (first entry)

XX DE TNFR1 expression modulation related antisense oligo SEQ ID No 62.

XX KW Antisense compound; tumour necrosis factor receptor 1; liver disease;  
 XX TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;  
 XX human; ds.

XX OS Homo sapiens.

XX PN WO200248168-A1.

XX PD 20-JUN-2002.

XX PF 22-OCT-2001; 2001WO-US051224.

XX PR 24-OCT-2000; 2000US-00695451.

XX PA (ISIS-) ISIS PHARM INC.

XX PI Baker BF, Cowsett LM, Zhang H, Dean NM;

XX DR WPI; 2002-583481/62.

XX Novel antisense compound targeted to nucleic acid molecule encoding tumour  
 XX necrosis factor receptor 1 (TNFR1), useful for treating humans having  
 XX disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.

XX Example 10; Page 45; 121pp; English.

XX The invention relates to an antisense compound 8 to 30 nucleotides in  
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor  
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of  
 CC TNFR1. The antisense compound is useful for inhibiting the expression of  
 CC TNFR1 in cells or tissues. The antisense compound is also useful for  
 CC treating an animal (preferably human) having a disease or condition  
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver  
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting  
 CC the expression of TNFR1. The antisense compound is useful for  
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.  
 CC This polynucleotide sequence represents a human oligonucleotide relating  
 CC to the TNFR1 of the invention

XX SQ Sequence 18 BP; 4 A; 3 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DE 1; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 20;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
QY 1075 AGTCCCACTCCAGGCTTC 1092
Db 18 AGTCCCACTCCAGGCTTC 1

RESULT 49
ABT05034/c
ID ABT05034 standard; DNA; 18 BP.
XX
AC ABT05034;
XX
DT 11-OCT-2002 (first entry)
XX
DE TNFR1 expression modulation related antisense oligo SEQ ID No 64.
XX
KW Antisense compound; tumour necrosis factor receptor 1; liver disease;
KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
KW human; ds.
XX
OS Homo sapiens.
XX
PN WO200248168-A1.
XX
PD 20-JUN-2002.
XX
PF 22-OCT-2001; 2001WO-US051224.
XX
PR 24-OCT-2000; 2000US-00695451.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Baker BF, Cowseert LM, Zhang H, Dean NM;
XX
DR WPI; 2002-583481/62.
XX
CC The invention relates to an antisense compound 8 to 30 nucleotides in
CC length targeted to nucleic acid molecule encoding tumour necrosis factor
CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
CC TNFR1. The antisense compound is useful for inhibiting the expression of
CC TNFR1 in cells or tissues. The antisense compound is also useful for
CC treating an animal (preferably human) having a disease or condition
CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
CC the expression of TNFR1. The antisense compound is useful for
CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
CC This polynucleotide sequence represents a human oligonucleotide relating
CC to the TNFR1 of the invention
XX
SQ Sequence 18 BP; 4 A; 3 C; 9 G; 2 T; 0 U; 0 Other;
Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1113 TCCCGTGCCCACTTCCAC 1130
Db 18 TCCCGTGCCCACTTCCAC 1

RESULT 50
ABT05037/c
ID ABT05037 standard; DNA; 18 BP.
XX
AC ABT05037;
XX
DT 11-OCT-2002 (first entry)
XX
DE TNFR1 expression modulation related antisense oligo SEQ ID No 137.
XX
KW Antisense compound; tumour necrosis factor receptor 1; liver disease;
KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
KW human; ds.
XX
OS Homo sapiens.
XX
PN WO200248168-A1.
XX
PD 20-JUN-2002.
XX
PF 22-OCT-2001; 2001WO-US051224.
XX
PR 24-OCT-2000; 2000US-00695451.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Baker BF, Cowseert LM, Zhang H, Dean NM;
XX
DR WPI; 2002-583481/62.
XX
CC The invention relates to an antisense compound 8 to 30 nucleotides in
CC length targeted to nucleic acid molecule encoding tumour necrosis factor
CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
CC TNFR1. The antisense compound is useful for inhibiting the expression of
CC TNFR1 in cells or tissues. The antisense compound is also useful for
CC treating an animal (preferably human) having a disease or condition
CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
CC the expression of TNFR1. The antisense compound is useful for
CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
CC This polynucleotide sequence represents a human oligonucleotide relating
CC to the TNFR1 of the invention
XX
SQ Sequence 18 BP; 5 A; 4 C; 6 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1162 GACTGTCCCACTTGGC 1179
Db 18 GACTGTCCCACTTGGC 1

RESULT 51
ABT05107/c
ID ABT05107 standard; DNA; 18 BP.
XX
AC ABT05107;
XX
DT 11-OCT-2002 (first entry)
XX
DE TNFR1 expression modulation related antisense oligo SEQ ID No 137.
XX
KW Antisense compound; tumour necrosis factor receptor 1; liver disease;
KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
KW human; ds.
XX
OS Homo sapiens.
XX
PN WO200248168-A1.
XX
PD 20-JUN-2002.
XX
PF 22-OCT-2001; 2001WO-US051224.
XX
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XX 24-OCT-2000; 2000US-00695451.  
XX (ISIS-) ISIS PHARM INC.  
XX Baker BF, Cowser LM, Zhang H, Dean NM;  
XX WPI; 2002-583481/62.  
XX Novel antisense compound targeted to nucleic acid molecule encoding tumor  
PT necrosis factor receptor 1 (TNFR1), useful for treating humans having  
PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.  
XX Example 18; Page 56; 121pp; English.  
XX The invention relates to an antisense compound 8 to 30 nucleotides in  
CC length targeted to nucleic acid molecule encoding tumour necrosis factor  
CC receptor 1 (TNFR1), where the antisense compound inhibits expression of  
CC TNFR1. The antisense compound is useful for inhibiting the expression of  
CC TNFR1 in cells or tissues. The antisense compound is also useful for  
CC treating an animal (preferably human) having a disease or condition  
CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver  
CC injury) or a hyperproliferative disorder such as cancer, by inhibiting  
CC the expression of TNFR1. The antisense compound is useful for  
CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.  
CC This polynucleotide sequence represents a human oligonucleotide relating  
CC to the TNFR1 of the invention  
XX SQ Sequence 18 BP; 7 A; 6 C; 1 G; 4 T; 0 U; 0 Other;  
Query Match 0.8%; Score 18; DB 1; Length 18;  
Best Local Similarity 100.0%; Pred. No. 20;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 992 TTGTTTGTGGGAAATCGA 1009  
Db 18 TTGTTTGTGGGAAATCGA 1  
RESULT 52  
ABT05108/c  
ID ABT05108 standard; DNA; 18 BP.  
XX AC ABT05108;  
XX DT 11-OCT-2002 (first entry)  
XX TNFR1 expression modulation related antisense oligo SEQ ID No 138.  
XX Antisense compound; tumour necrosis factor receptor 1; liver disease;  
XX TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;  
XX human; ds.  
XX Homo sapiens.  
XX WO200248168-A1.  
XX PN 20-JUN-2002.  
XX PF 22-OCT-2001; 2001WO-US051224.  
XX PR 24-OCT-2000; 2000US-00695451.  
XX PA (ISIS-) ISIS PHARM INC.  
XX PI Baker BF, Cowser LM, Zhang H, Dean NM;  
XX WPI; 2002-583481/62.  
XX Novel antisense compound targeted to nucleic acid molecule encoding tumor  
PT necrosis factor receptor 1 (TNFR1), useful for treating humans having  
PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.  
XX Example 18; Page 56; 121pp; English.

PS Example 18; Page 56; 121pp; English.  
XX The invention relates to an antisense compound 8 to 30 nucleotides in  
CC length targeted to nucleic acid molecule encoding tumour necrosis factor  
CC receptor 1 (TNFR1), where the antisense compound inhibits expression of  
CC TNFR1. The antisense compound is useful for inhibiting the expression of  
CC TNFR1 in cells or tissues. The antisense compound is also useful for  
CC treating an animal (preferably human) having a disease or condition  
CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver  
CC injury) or a hyperproliferative disorder such as cancer, by inhibiting  
CC the expression of TNFR1. The antisense compound is useful for  
CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.  
CC This polynucleotide sequence represents a human oligonucleotide relating  
CC to the TNFR1 of the invention  
XX SQ Sequence 18 BP; 3 A; 3 C; 9 G; 3 T; 0 U; 0 Other;  
Query Match 0.8%; Score 18; DB 1; Length 18;  
Best Local Similarity 100.0%; Pred. No. 20;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1222 CCCATCCTTGGCAGCC 1239  
Db 18 CCCATCCTTGGCAGCC 1  
RESULT 53  
ABT05109/c  
ID ABT05109 standard; DNA; 18 BP.  
XX AC ABT05109;  
XX DT 11-OCT-2002 (first entry)  
XX TNFR1 expression modulation related antisense oligo SEQ ID No 139.  
XX Antisense compound; tumour necrosis factor receptor 1; liver disease;  
XX TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;  
XX human; ds.  
XX Homo sapiens.  
XX WO200248168-A1.  
XX PN 20-JUN-2002.  
XX PF 22-OCT-2001; 2001WO-US051224.  
XX PR 24-OCT-2000; 2000US-00695451.  
XX PA (ISIS-) ISIS PHARM INC.  
XX PI Baker BF, Cowser LM, Zhang H, Dean NM;  
XX WPI; 2002-583481/62.  
XX Novel antisense compound targeted to nucleic acid molecule encoding tumor  
PT necrosis factor receptor 1 (TNFR1), useful for treating humans having  
PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.  
XX Example 18; Page 56; 121pp; English.  
XX The invention relates to an antisense compound 8 to 30 nucleotides in  
CC length targeted to nucleic acid molecule encoding tumour necrosis factor  
CC receptor 1 (TNFR1), where the antisense compound inhibits expression of  
CC TNFR1. The antisense compound is useful for inhibiting the expression of  
CC TNFR1 in cells or tissues. The antisense compound is also useful for  
CC treating an animal (preferably human) having a disease or condition  
CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver  
CC injury) or a hyperproliferative disorder such as cancer, by inhibiting  
CC the expression of TNFR1. The antisense compound is useful for  
CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.  
CC This polynucleotide sequence represents a human oligonucleotide relating  
CC to the TNFR1 of the invention

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CC to the TNFR1 of the invention
XX
SQ Sequence 18 BP; 1 A; 8 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1270 CAGAAGTGGGAGGACAGC 1287
Db 18 CAGAAGTGGGAGGACAGC 1

RESULT 54
ABT05026/c
ID ABT05026 standard; DNA; 18 BP.
XX
AC ABT05026;
XX
DT 11-OCT-2002 (first entry)
XX
DE TNFR1 expression modulation related antisense oligo SEQ ID No 56.
XX
DE Antisense compound; tumour necrosis factor receptor 1; liver disease;
XX TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
XX human; ds.
XX
OS Homo sapiens.
XX
XX WO200248168-Al.
XX
XX PD 20-JUN-2002.
XX
XX PF 22-OCT-2001; 2001WO-US051224.
XX
XX PR 24-OCT-2000; 2000US-00695451.
XX
XX PA (ISIS-) ISIS PHARM INC.
XX
XX PI Baker BF, Cowsett LM, Zhang H, Dean NM;
XX WPI; 2002-583481/62.
XX
XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
XX necrosis factor receptor 1 (TNFR1), useful for treating humans having
XX disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX
XX Example 10; Page 45; 121pp; English.
XX
XX The invention relates to an antisense compound 8 to 30 nucleotides in
XX length targeted to nucleic acid molecule encoding tumour necrosis factor
XX receptor 1 (TNFR1), where the antisense compound inhibits expression of
XX TNFR1. The antisense compound is useful for inhibiting the expression of
XX TNFR1 in cells or tissues. The antisense compound is also useful for
XX treating an animal (preferably human) having a disease or condition
XX associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
XX injury) or a hyperproliferative disorder such as cancer, by inhibiting
XX the expression of TNFR1. The antisense compound is useful for
XX diagnostics, therapeutics, prophylaxis and as research reagents and kits.
XX This polynucleotide sequence represents a human oligonucleotide relating
XX to the TNFR1 of the invention
XX
SQ Sequence 18 BP; 9 A; 1 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 921 TTGCGCTTTTATCCCTCCT 938
Db 18 TTGCGCTTTTATCCCTCCT 1

RESULT 55
ABT05029/c
ID ABT05029 standard; DNA; 18 BP.
XX
AC ABT05029;
XX
DT 11-OCT-2002 (first entry)
XX
DE TNFR1 expression modulation related antisense oligo SEQ ID No 59.
XX
DE Antisense compound; tumour necrosis factor receptor 1; liver disease;
XX TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
XX human; ds.
XX
OS Homo sapiens.
XX
XX WO200248168-Al.
XX
XX PD 20-JUN-2002.
XX
XX PF 22-OCT-2001; 2001WO-US051224.
XX
XX PR 24-OCT-2000; 2000US-00695451.
XX
XX PA (ISIS-) ISIS PHARM INC.
XX
XX PI Baker BF, Cowsett LM, Zhang H, Dean NM;
XX WPI; 2002-583481/62.
XX
XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
XX necrosis factor receptor 1 (TNFR1), useful for treating humans having
XX disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX
XX Example 10; Page 45; 121pp; English.
XX
XX The invention relates to an antisense compound 8 to 30 nucleotides in
XX length targeted to nucleic acid molecule encoding tumour necrosis factor
XX receptor 1 (TNFR1), where the antisense compound inhibits expression of
XX TNFR1. The antisense compound is useful for inhibiting the expression of
XX TNFR1 in cells or tissues. The antisense compound is also useful for
XX treating an animal (preferably human) having a disease or condition
XX associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
XX injury) or a hyperproliferative disorder such as cancer, by inhibiting
XX the expression of TNFR1. The antisense compound is useful for
XX diagnostics, therapeutics, prophylaxis and as research reagents and kits.
XX This polynucleotide sequence represents a human oligonucleotide relating
XX to the TNFR1 of the invention
XX
SQ Sequence 18 BP; 4 A; 4 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 952 ATGTATCGCTACCAACGG 969
Db 18 ATGTATCGCTACCAACGG 1

RESULT 56
ABT05081/c
ID ABT05081 standard; DNA; 18 BP.
XX
AC ABT05081;
XX
DT 11-OCT-2002 (first entry)
XX
DE TNFR1 expression modulation related antisense oligo SEQ ID No 111.
XX
DE Antisense compound; tumour necrosis factor receptor 1; liver disease;
XX TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
XX human; ds.
XX
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XX OS Homo sapiens.
XX PN WO200248168-A1.
XX PD 20-JUN-2002.
XX PF 22-OCT-2001; 2001WO-US051224.
XX PR 24-OCT-2000; 2000US-00695451.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Baker BF, Cowseert LM, Zhang H, Dean NM;
XX WPI; 2002-583481/62.
XX DR Novel antisense compound targeted to nucleic acid molecule encoding tumor
PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX PS Example 18; Page 56; 121pp; English.
XX CC The invention relates to an antisense compound 8 to 30 nucleotides in
CC length targeted to nucleic acid molecule encoding tumour necrosis factor
CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
CC TNFR1. The antisense compound is useful for inhibiting the expression of
CC TNFR1 in cells or tissues. The antisense compound is also useful for
CC treating an animal (preferably human) having a disease or condition
CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
CC the expression of TNFR1. The antisense compound is useful for
CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
CC This polynucleotide sequence represents a human oligonucleotide relating
CC to the TNFR1 of the invention
XX SQ Sequence 18 BP; 1 A; 5 C; 4 G; 8 T; 0 U; 0 Other;
XX Query Match 0.8%; Score 18; DB 1; Length 18;
XX Best Local Similarity 100.0%; Pred. No. 20;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 727 TGCAGAGAGAAACAGAAC 744
Db 18 TGCAGAGAGAAACAGAAC 1
RESULT 57
ABT05103/c
ID ABT05103 standard; DNA; 18 BP.
XX AC ABT05103;
XX DT 11-OCT-2002 (first entry)
XX TNFR1 expression modulation related antisense oligo SEQ ID No 133.
XX DE 22-OCT-2001; 2001WO-US051224.
XX KW Antisense compound; tumour necrosis factor receptor 1; liver disease;
XX TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
XX human; ds.
XX OS Homo sapiens.
XX PN WO200248168-A1.
XX PD 20-JUN-2002.
XX PF 22-OCT-2001; 2001WO-US051224.
XX PR 24-OCT-2000; 2000US-00695451.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Baker BF, Cowseert LM, Zhang H, Dean NM;
XX WPI; 2002-583481/62.
XX DR Novel antisense compound targeted to nucleic acid molecule encoding tumor
PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX PS Example 18; Page 56; 121pp; English.
XX CC The invention relates to an antisense compound 8 to 30 nucleotides in
CC length targeted to nucleic acid molecule encoding tumour necrosis factor
CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
CC TNFR1. The antisense compound is useful for inhibiting the expression of
CC TNFR1 in cells or tissues. The antisense compound is also useful for
CC treating an animal (preferably human) having a disease or condition
CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
CC the expression of TNFR1. The antisense compound is useful for
CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
CC This polynucleotide sequence represents a human oligonucleotide relating
CC to the TNFR1 of the invention
XX SQ Sequence 18 BP; 1 A; 5 C; 4 G; 8 T; 0 U; 0 Other;
XX Query Match 0.8%; Score 18; DB 1; Length 18;
XX Best Local Similarity 100.0%; Pred. No. 20;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 727 TGCAGAGAGAAACAGAAC 744
Db 18 TGCAGAGAGAAACAGAAC 1
RESULT 58
ABT05086/c
ID ABT05086 standard; DNA; 18 BP.
XX AC ABT05086;
XX DT 11-OCT-2002 (first entry)
XX TNFR1 expression modulation related antisense oligo SEQ ID No 116.
XX DE 22-OCT-2001; 2001WO-US051224.
XX KW Antisense compound; tumour necrosis factor receptor 1; liver disease;
XX TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
XX human; ds.
XX OS Homo sapiens.
XX PN WO200248168-A1.
XX PD 20-JUN-2002.
XX PF 22-OCT-2001; 2001WO-US051224.
XX PR 24-OCT-2000; 2000US-00695451.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Baker BF, Cowseert LM, Zhang H, Dean NM;
XX WPI; 2002-583481/62.
XX DR Novel antisense compound targeted to nucleic acid molecule encoding tumor
PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX PS Example 18; Page 56; 121pp; English.
XX CC The invention relates to an antisense compound 8 to 30 nucleotides in
CC length targeted to nucleic acid molecule encoding tumour necrosis factor
CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
CC TNFR1. The antisense compound is useful for inhibiting the expression of
CC TNFR1 in cells or tissues. The antisense compound is also useful for
CC treating an animal (preferably human) having a disease or condition
CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
CC the expression of TNFR1. The antisense compound is useful for
CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
CC This polynucleotide sequence represents a human oligonucleotide relating
CC to the TNFR1 of the invention
XX SQ Sequence 18 BP; 4 A; 4 C; 5 G; 5 T; 0 U; 0 Other;
XX Query Match 0.8%; Score 18; DB 1; Length 18;
XX Best Local Similarity 100.0%; Pred. No. 20;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 952 ATGTATCGCTACCAACGG 969
Db 18 ATGTATCGCTACCAACGG 1
RESULT 59
ABT05086/c
ID ABT05086 standard; DNA; 18 BP.
XX AC ABT05086;
XX DT 11-OCT-2002 (first entry)
XX TNFR1 expression modulation related antisense oligo SEQ ID No 116.
XX DE 22-OCT-2001; 2001WO-US051224.
XX KW Antisense compound; tumour necrosis factor receptor 1; liver disease;
XX TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
XX human; ds.
XX OS Homo sapiens.
XX PN WO200248168-A1.
XX PD 20-JUN-2002.
XX PF 22-OCT-2001; 2001WO-US051224.
XX PR 24-OCT-2000; 2000US-00695451.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Baker BF, Cowseert LM, Zhang H, Dean NM;
XX WPI; 2002-583481/62.
XX DR Novel antisense compound targeted to nucleic acid molecule encoding tumor
PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX PS Example 18; Page 56; 121pp; English.
XX CC The invention relates to an antisense compound 8 to 30 nucleotides in
CC length targeted to nucleic acid molecule encoding tumour necrosis factor
CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
CC TNFR1. The antisense compound is useful for inhibiting the expression of
CC TNFR1 in cells or tissues. The antisense compound is also useful for
CC treating an animal (preferably human) having a disease or condition
CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
CC the expression of TNFR1. The antisense compound is useful for
CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
CC This polynucleotide sequence represents a human oligonucleotide relating
CC to the TNFR1 of the invention
XX SQ Sequence 18 BP; 4 A; 4 C; 5 G; 5 T; 0 U; 0 Other;
XX Query Match 0.8%; Score 18; DB 1; Length 18;
XX Best Local Similarity 100.0%; Pred. No. 20;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 952 ATGTATCGCTACCAACGG 969
Db 18 ATGTATCGCTACCAACGG 1
```

CC TNFR1. The antisense compound is useful for inhibiting the expression of  
 CC TNFR1 in cells or tissues. The antisense compound is also useful for  
 CC treating an animal (preferably human) having a disease or condition  
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver  
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting  
 CC the expression of TNFR1. The antisense compound is useful for  
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.  
 CC This polynucleotide sequence represents a human oligonucleotide relating  
 CC to the TNFR1 of the invention  
 XX  
 SQ Sequence 18 BP; 4 A; 5 C; 4 G; 5 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 18; DB 1; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 20;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 781 GAAACGAGTGTGTCTCC 798  
 Db 18 GAAACGAGTGTGTCTCC 1  
 RESULT 59  
 ABT05088/c  
 ID ABT05088 standard; DNA; 18 BP.  
 XX  
 AC ABT05088;  
 XX  
 DT 11-OCT-2002 (first entry)  
 XX  
 DE TNFR1 expression modulation related antisense oligo SEQ ID No 118.  
 XX  
 KW Antisense compound; tumour necrosis factor receptor 1; liver disease;  
 KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;  
 KW human; ds.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200248168-A1.  
 XX  
 PD 20-JUN-2002.  
 XX  
 PF 22-OCT-2001; 2001WO-US051224.  
 XX  
 PR 24-OCT-2000; 2000US-00695451.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Baker BF, Cowser LM, Zhang H, Dean NM;  
 XX  
 PS WPI; 2002-583481/62.  
 XX  
 PT Novel antisense compound targeted to nucleic acid molecule encoding tumor  
 PT necrosis factor receptor 1 (TNFR1), useful for treating humans having  
 PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.  
 XX  
 PS Example 18; Page 56; 121pp; English.  
 XX  
 CC The invention relates to an antisense compound 8 to 30 nucleotides in  
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor  
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of  
 CC TNFR1. The antisense compound is useful for inhibiting the expression of  
 CC TNFR1 in cells or tissues. The antisense compound is also useful for  
 CC treating an animal (preferably human) having a disease or condition  
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver  
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting  
 CC the expression of TNFR1. The antisense compound is useful for  
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.  
 CC This polynucleotide sequence represents a human oligonucleotide relating  
 CC to the TNFR1 of the invention  
 XX  
 SQ Sequence 18 BP; 3 A; 4 C; 3 G; 8 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 18; DB 1; Length 18;

Best Local Similarity 100.0%; Pred. No. 20;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 805 AACTGTAAAGAAAGCCTG 822  
 Db 18 AACTGTAAAGAAAGCCTG 1  
 RESULT 60  
 ABT05091/c  
 ID ABT05091 standard; DNA; 18 BP.  
 XX  
 AC ABT05091;  
 XX  
 DT 11-OCT-2002 (first entry)  
 XX  
 DE TNFR1 expression modulation related antisense oligo SEQ ID No 121.  
 XX  
 KW Antisense compound; tumour necrosis factor receptor 1; liver disease;  
 KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;  
 KW human; ds.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200248168-A1.  
 XX  
 PD 20-JUN-2002.  
 XX  
 PF 22-OCT-2001; 2001WO-US051224.  
 XX  
 PR 24-OCT-2000; 2000US-00695451.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Baker BF, Cowser LM, Zhang H, Dean NM;  
 XX  
 PS WPI; 2002-583481/62.  
 XX  
 PT Novel antisense compound targeted to nucleic acid molecule encoding tumor  
 PT necrosis factor receptor 1 (TNFR1), useful for treating humans having  
 PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.  
 XX  
 PS Example 18; Page 56; 121pp; English.  
 XX  
 CC The invention relates to an antisense compound 8 to 30 nucleotides in  
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor  
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of  
 CC TNFR1. The antisense compound is useful for inhibiting the expression of  
 CC TNFR1 in cells or tissues. The antisense compound is also useful for  
 CC treating an animal (preferably human) having a disease or condition  
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver  
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting  
 CC the expression of TNFR1. The antisense compound is useful for  
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.  
 CC This polynucleotide sequence represents a human oligonucleotide relating  
 CC to the TNFR1 of the invention  
 XX  
 SQ Sequence 18 BP; 10 A; 4 C; 3 G; 1 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 18; DB 1; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 20;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 903 GGTCAATTTCTTTGGTCT 920  
 Db 18 GGTCAATTTCTTTGGTCT 1  
 RESULT 61  
 ABT05098/c  
 ID ABT05098 standard; DNA; 18 BP.  
 XX  
 AC ABT05098;

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XX DT 11-OCT-2002 (first entry)
XX DE TNFR1 expression modulation related antisense oligo SEQ ID No 128.
XX KW Antisense compound; tumour necrosis factor receptor 1; liver disease;
XX KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
XX KW human; ds.
XX OS Homo sapiens.
XX PN WO200248168-A1.
XX PD 20-JUN-2002.
XX PF 22-OCT-2001; 2001WO-US051224.
XX PR 24-OCT-2000; 2000US-00695451.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Baker BF, Cowseert LM, Zhang H, Dean NM;
XX PX WPI; 2002-583481/62.
XX PT Novel antisense compound targeted to nucleic acid molecule encoding tumor
XX PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
XX PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX PS Example 18; Page 56; 121pp; English.
XX CC The invention relates to an antisense compound 8 to 30 nucleotides in
XX CC length targeted to nucleic acid molecule encoding tumour necrosis factor
XX CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
XX CC TNFR1. The antisense compound is useful for inhibiting the expression of
XX CC TNFR1 in cells or tissues. The antisense compound is also useful for
XX CC treating an animal (preferably human) having a disease or condition
XX CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
XX CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
XX CC the expression of TNFR1. The antisense compound is useful for
XX CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
XX CC This polynucleotide sequence represents a human oligonucleotide relating
XX CC to the TNFR1 of the invention
XX SQ Sequence 18 BP; 9 A; 0 C; 8 G; 1 T; 0 U; 0 Other;
Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 925 CTTTATCCCTCCTCTTC 942
Db 18 CTTTATCCCTCCTCTTC 1
RESULT 62
ABT05093/c
ID ABT05093 standard; DNA; 18 BP.
XX AC ABT05093;
XX DT 11-OCT-2002 (first entry)
XX DE TNFR1 expression modulation related antisense oligo SEQ ID No 123.
XX KW Antisense compound; tumour necrosis factor receptor 1; liver disease;
XX KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
XX KW human; ds.
XX OS Homo sapiens.
XX PN WO200248168-A1.
XX PD 20-JUN-2002.
XX PF 22-OCT-2001; 2001WO-US051224.
XX PR 24-OCT-2000; 2000US-00695451.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Baker BF, Cowseert LM, Zhang H, Dean NM;
XX PX WPI; 2002-583481/62.
XX PT Novel antisense compound targeted to nucleic acid molecule encoding tumor
XX PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
XX PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX PS Example 18; Page 56; 121pp; English.
XX CC The invention relates to an antisense compound 8 to 30 nucleotides in
XX CC length targeted to nucleic acid molecule encoding tumour necrosis factor
XX CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
XX CC TNFR1. The antisense compound is useful for inhibiting the expression of
XX CC TNFR1 in cells or tissues. The antisense compound is also useful for
XX CC treating an animal (preferably human) having a disease or condition
XX CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
XX CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
XX CC the expression of TNFR1. The antisense compound is useful for
XX CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
XX CC This polynucleotide sequence represents a human oligonucleotide relating
XX CC to the TNFR1 of the invention
XX SQ Sequence 18 BP; 11 A; 3 C; 4 G; 0 T; 0 U; 0 Other;
Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 909 TTCTTTGGCTCTTGCT 926
Db 18 TTCTTTGGCTCTTGCT 1
RESULT 63
ABT05017/c
ID ABT05017 standard; DNA; 18 BP.
XX AC ABT05017;
XX DT 11-OCT-2002 (first entry)
XX DE TNFR1 expression modulation related antisense oligo SEQ ID No 47.
XX KW Antisense compound; tumour necrosis factor receptor 1; liver disease;
XX KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
XX KW human; ds.
XX OS Homo sapiens.
XX PN WO200248168-A1.
XX PD 20-JUN-2002.
XX PF 22-OCT-2001; 2001WO-US051224.
XX PR 24-OCT-2000; 2000US-00695451.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Baker BF, Cowseert LM, Zhang H, Dean NM;
XX PX WPI; 2002-583481/62.
XX PT Novel antisense compound targeted to nucleic acid molecule encoding tumor

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PD 20-JUN-2002.
XX 22-OCT-2001; 2001WO-US051224.
XX 24-OCT-2000; 2000US-00695451.
XX (ISIS-) ISIS PHARM INC.
XX Baker BF, Cowseert LM, Zhang H, Dean NM;
XX WPI; 2002-583481/62.
XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
XX necrosis factor receptor 1 (TNFR1), useful for treating humans having
XX disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX Example 18; Page 56; 121pp; English.
XX The invention relates to an antisense compound 8 to 30 nucleotides in
XX length targeted to nucleic acid molecule encoding tumour necrosis factor
XX receptor 1 (TNFR1), where the antisense compound inhibits expression of
XX TNFR1. The antisense compound is useful for inhibiting the expression of
XX TNFR1 in cells or tissues. The antisense compound is also useful for
XX treating an animal (preferably human) having a disease or condition
XX associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
XX injury) or a hyperproliferative disorder such as cancer, by inhibiting
XX the expression of TNFR1. The antisense compound is useful for
XX diagnostics, therapeutics, prophylaxis and as research reagents and kits.
XX This polynucleotide sequence represents a human oligonucleotide relating
XX to the TNFR1 of the invention
XX SQ Sequence 18 BP; 11 A; 3 C; 4 G; 0 T; 0 U; 0 Other;
Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 909 TTCTTTGGCTCTTGCT 926
Db 18 TTCTTTGGCTCTTGCT 1
RESULT 63
ABT05017/c
ID ABT05017 standard; DNA; 18 BP.
XX AC ABT05017;
XX DT 11-OCT-2002 (first entry)
XX DE TNFR1 expression modulation related antisense oligo SEQ ID No 47.
XX KW Antisense compound; tumour necrosis factor receptor 1; liver disease;
XX KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
XX KW human; ds.
XX OS Homo sapiens.
XX PN WO200248168-A1.
XX PD 20-JUN-2002.
XX PF 22-OCT-2001; 2001WO-US051224.
XX PR 24-OCT-2000; 2000US-00695451.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Baker BF, Cowseert LM, Zhang H, Dean NM;
XX PX WPI; 2002-583481/62.
XX PT Novel antisense compound targeted to nucleic acid molecule encoding tumor

```

PT necrosis factor receptor 1 (TNFR1), useful for treating humans having  
PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.  
XX  
PS Example 10; Page 45; 121pp; English.

CC The invention relates to an antisense compound 8 to 30 nucleotides in  
CC length targeted to nucleic acid molecule encoding tumour necrosis factor  
CC receptor 1 (TNFR1), where the antisense compound inhibits expression of  
CC TNFR1. The antisense compound is useful for inhibiting the expression of  
CC TNFR1 in cells or tissues. The antisense compound is also useful for  
CC treating an animal (preferably human) having a disease or condition  
CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver  
CC injury) or a hyperproliferative disorder such as cancer, by inhibiting  
CC the expression of TNFR1. The antisense compound is useful for  
CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.  
CC This polynucleotide sequence represents a human oligonucleotide relating  
CC to the TNFR1 of the invention

SQ Sequence 18 BP; 1 A; 5 C; 4 G; 8 T; 0 U; 0 Other;  
Query Match 0.8%; Score 18; DB 1; Length 18;  
Best Local Similarity 100.0%; Pred. No. 20;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 732 GGAGAAACAGAACCCGT 749  
Db 18 GGAGAAACAGAACCCGT 1

## RESULT 64

ABT05035/c  
ID ABT05035 standard; DNA; 18 BP.

XX AC ABT05035;  
XX  
DT 11-OCT-2002 (first entry)  
XX  
DE TNFR1 expression modulation related antisense oligo SEQ ID No 65.  
XX  
KW Antisense compound; tumour necrosis factor receptor 1; liver disease;  
KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;  
KW human; ds.

XX Homo sapiens.

XX WO200248168-A1.

XX 20-JUN-2002.

XX 22-OCT-2001; 2001WO-US051224.

XX 24-OCT-2000; 2000US-00695451.

XX (ISIS-) ISIS PHARM INC.

XX Baker BF, Cowser LM, Zhang H, Dean NM;  
XX WPI; 2002-583481/62.

XX Novel antisense compound targeted to nucleic acid molecule encoding tumor  
XX necrosis factor receptor 1 (TNFR1), useful for treating humans having  
XX disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.  
XX Example 10; Page 45; 121pp; English.

CC The invention relates to an antisense compound 8 to 30 nucleotides in  
CC length targeted to nucleic acid molecule encoding tumour necrosis factor  
CC receptor 1 (TNFR1), where the antisense compound inhibits expression of  
CC TNFR1. The antisense compound is useful for inhibiting the expression of  
CC TNFR1 in cells or tissues. The antisense compound is also useful for  
CC treating an animal (preferably human) having a disease or condition  
CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver  
CC injury) or a hyperproliferative disorder such as cancer, by inhibiting

CC the expression of TNFR1. The antisense compound is useful for  
CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.  
CC This polynucleotide sequence represents a human oligonucleotide relating  
CC to the TNFR1 of the invention

SQ Sequence 18 BP; 5 A; 2 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;  
Best Local Similarity 100.0%; Pred. No. 20;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1118 TGCCAGTTCACCTTCA 1135  
Db 18 TGCCAGTTCACCTTCA 1

## RESULT 65

ABT05084/c  
ID ABT05084 standard; DNA; 18 BP.

XX AC ABT05084;

XX DT 11-OCT-2002 (first entry)

XX TNFR1 expression modulation related antisense oligo SEQ ID No 114.

XX Antisense compound; tumour necrosis factor receptor 1; liver disease;  
XX TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;  
XX human; ds.

XX Homo sapiens.

XX WO200248168-A1.

XX 20-JUN-2002.

XX 22-OCT-2001; 2001WO-US051224.

XX 24-OCT-2000; 2000US-00695451.

XX (ISIS-) ISIS PHARM INC.

XX Baker BF, Cowser LM, Zhang H, Dean NM;  
XX WPI; 2002-583481/62.

XX Novel antisense compound targeted to nucleic acid molecule encoding tumor  
XX necrosis factor receptor 1 (TNFR1), useful for treating humans having  
XX disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.  
XX Example 18; Page 56; 121pp; English.

CC The invention relates to an antisense compound 8 to 30 nucleotides in  
CC length targeted to nucleic acid molecule encoding tumour necrosis factor  
CC receptor 1 (TNFR1), where the antisense compound inhibits expression of  
CC TNFR1. The antisense compound is useful for inhibiting the expression of  
CC TNFR1 in cells or tissues. The antisense compound is also useful for  
CC treating an animal (preferably human) having a disease or condition  
CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver  
CC injury) or a hyperproliferative disorder such as cancer, by inhibiting  
CC the expression of TNFR1. The antisense compound is useful for  
CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.  
CC This polynucleotide sequence represents a human oligonucleotide relating  
CC to the TNFR1 of the invention

SQ Sequence 18 BP; 3 A; 5 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;  
Best Local Similarity 100.0%; Pred. No. 20;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 775 CTAGAGAAACAGTCT 792  
|||||

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Db      18 CTAAGAGAAAAACGAGTGT 1
RESULT 66
ABT05100/c
ID      ABT05100 standard; DNA; 18 BP.
XX
AC      ABT05100;
XX
DT      11-OCT-2002 (first entry)
XX
DE      TNFR1 expression modulation related antisense oligo SEQ ID No 130.
XX
KW      Antisense compound; tumour necrosis factor receptor 1; liver disease;
KW      TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
KW      human; ds.
XX
OS      Homo sapiens.
XX
PN      WO200248168-A1.
XX
PD      20-JUN-2002.
XX
PF      22-OCT-2001; 2001WO-US051224.
XX
PR      24-OCT-2000; 2000US-00695451.
XX
PS      (ISIS-) ISIS PHARM INC.
XX
PI      Baker BF, Cowseert LM, Zhang H, Dean NM;
PI      WPI; 2002-583481/62.
XX
PT      Novel antisense compound targeted to nucleic acid molecule encoding tumor
PT      necrosis factor receptor 1 (TNFR1), useful for treating humans having
PT      disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX
PS      Example 18; Page 56; 121pp; English.
XX
CC      The invention relates to an antisense compound 8 to 30 nucleotides in
CC      length targeted to nucleic acid molecule encoding tumour necrosis factor
CC      receptor 1 (TNFR1), where the antisense compound inhibits expression of
CC      TNFR1. The antisense compound is useful for inhibiting the expression of
CC      TNFR1 in cells or tissues. The antisense compound is also useful for
CC      treating an animal (preferably human) having a disease or condition
CC      associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
CC      injury) or a hyperproliferative disorder such as cancer, by inhibiting
CC      the expression of TNFR1. The antisense compound is useful for
CC      diagnostics, therapeutics, prophylaxis and as research reagents and kits.
CC      This polynucleotide sequence represents a human oligonucleotide relating
CC      to the TNFR1 of the invention
XX
SQ      Sequence 18 BP; 8 A; 2 C; 7 G; 1 T; 0 U; 0 Other;

Query Match      0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      931 TCCCTCCTCTTCATGCT 948
DB      18 TCCCTCCTCTTCATGCT 1
|||||
RESULT 67
ABT05105/c
ID      ABT05105 standard; DNA; 18 BP.
XX
AC      ABT05105;
XX
DT      11-OCT-2002 (first entry)
XX
DE      TNFR1 expression modulation related antisense oligo SEQ ID No 135.
XX

KW      Antisense compound; tumour necrosis factor receptor 1; liver disease;
KW      TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
KW      human; ds.
XX
OS      Homo sapiens.
XX
PN      WO200248168-A1.
XX
PD      20-JUN-2002.
XX
PF      22-OCT-2001; 2001WO-US051224.
XX
PR      24-OCT-2000; 2000US-00695451.
XX
PS      (ISIS-) ISIS PHARM INC.
XX
PI      Baker BF, Cowseert LM, Zhang H, Dean NM;
PI      WPI; 2002-583481/62.
XX
PT      Novel antisense compound targeted to nucleic acid molecule encoding tumor
PT      necrosis factor receptor 1 (TNFR1), useful for treating humans having
PT      disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX
PS      Example 18; Page 56; 121pp; English.
XX
CC      The invention relates to an antisense compound 8 to 30 nucleotides in
CC      length targeted to nucleic acid molecule encoding tumour necrosis factor
CC      receptor 1 (TNFR1), where the antisense compound inhibits expression of
CC      TNFR1. The antisense compound is useful for inhibiting the expression of
CC      TNFR1 in cells or tissues. The antisense compound is also useful for
CC      treating an animal (preferably human) having a disease or condition
CC      associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
CC      injury) or a hyperproliferative disorder such as cancer, by inhibiting
CC      the expression of TNFR1. The antisense compound is useful for
CC      diagnostics, therapeutics, prophylaxis and as research reagents and kits.
CC      This polynucleotide sequence represents a human oligonucleotide relating
CC      to the TNFR1 of the invention
XX
SQ      Sequence 18 BP; 8 A; 2 C; 7 G; 1 T; 0 U; 0 Other;

Query Match      0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      931 TCCCTCCTCTTCATGCT 948
DB      18 TCCCTCCTCTTCATGCT 1
|||||
RESULT 68
ABT05106/c
ID      ABT05106 standard; DNA; 18 BP.
XX
AC      ABT05106;
XX
DT      11-OCT-2002 (first entry)
XX
DE      TNFR1 expression modulation related antisense oligo SEQ ID No 136.
XX
KW      Antisense compound; tumour necrosis factor receptor 1; liver disease;
KW      TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
KW      human; ds.
XX
OS      Homo sapiens.
XX
PN      WO200248168-A1.
XX
PD      20-JUN-2002.
XX
PF      22-OCT-2001; 2001WO-US051224.
XX
PR      24-OCT-2000; 2000US-00695451.
XX
PS      (ISIS-) ISIS PHARM INC.
XX
PI      Baker BF, Cowseert LM, Zhang H, Dean NM;
PI      WPI; 2002-583481/62.
XX
PT      Novel antisense compound targeted to nucleic acid molecule encoding tumor
PT      necrosis factor receptor 1 (TNFR1), useful for treating humans having
PT      disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX
PS      Example 18; Page 56; 121pp; English.
XX
CC      The invention relates to an antisense compound 8 to 30 nucleotides in
CC      length targeted to nucleic acid molecule encoding tumour necrosis factor
CC      receptor 1 (TNFR1), where the antisense compound inhibits expression of
CC      TNFR1. The antisense compound is useful for inhibiting the expression of
CC      TNFR1 in cells or tissues. The antisense compound is also useful for
CC      treating an animal (preferably human) having a disease or condition
CC      associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
CC      injury) or a hyperproliferative disorder such as cancer, by inhibiting
CC      the expression of TNFR1. The antisense compound is useful for
CC      diagnostics, therapeutics, prophylaxis and as research reagents and kits.
CC      This polynucleotide sequence represents a human oligonucleotide relating
CC      to the TNFR1 of the invention
XX
SQ      Sequence 18 BP; 9 A; 2 C; 5 G; 2 T; 0 U; 0 Other;

Query Match      0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      982 CTCCTACTCCATGCTTTGT 999
DB      18 CTCCTACTCCATGCTTTGT 1
|||||

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XX PA (ISIS-) ISIS PHARM INC.
XX PI Baker BF, Cowsett LM, Zhang H, Dean NM;
XX DR WPI; 2002-583481/62.
XX PT Novel antisense compound targeted to nucleic acid molecule encoding tumor
XX PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
XX PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX PS Example 18; Page 56; 121pp; English.
XX
CC The invention relates to an antisense compound 8 to 30 nucleotides in
CC length targeted to nucleic acid molecule encoding tumour necrosis factor
CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
CC TNFR1. The antisense compound is useful for inhibiting the expression of
CC TNFR1 in cells or tissues. The antisense compound is also useful for
CC treating an animal (preferably human) having a disease or condition
CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
CC the expression of TNFR1. The antisense compound is useful for
CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
CC This polynucleotide sequence represents a human oligonucleotide relating
CC to the TNFR1 of the invention
XX
SQ Sequence 18 BP; 7 A; 5 C; 2 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 990 CATTGTTTGGGAATC 1007
DB 18 CATTGTTTGGGAATC 1
RESULT 69
ABT05020/c
ID ABT05020 standard; DNA; 18 BP.
AC ABT05020;
XX
DT 11-OCT-2002 (first entry)
TNFR1 expression modulation related antisense oligo SEQ ID No 50.
XX
DE Antisense compound; tumour necrosis factor receptor 1; liver disease;
KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
KW human; ds.
XX
OS Homo sapiens.
XX
PN WO200248168-A1.
XX
PD 20-JUN-2002.
XX
PF 22-OCT-2001; 2001WO-US051224.
XX
PR 24-OCT-2000; 2000US-00695451.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Baker BF, Cowsett LM, Zhang H, Dean NM;
XX
DR WPI; 2002-583481/62.
XX
PT Novel antisense compound targeted to nucleic acid molecule encoding tumor
XX PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
XX PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX PS Example 10; Page 45; 121pp; English.
XX
XX The invention relates to an antisense compound 8 to 30 nucleotides in
XX length targeted to nucleic acid molecule encoding tumour necrosis factor
XX receptor 1 (TNFR1), where the antisense compound inhibits expression of
XX TNFR1. The antisense compound is useful for inhibiting the expression of
XX TNFR1 in cells or tissues. The antisense compound is also useful for
XX treating an animal (preferably human) having a disease or condition
XX associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
XX injury) or a hyperproliferative disorder such as cancer, by inhibiting
XX the expression of TNFR1. The antisense compound is useful for
XX diagnostics, therapeutics, prophylaxis and as research reagents and kits.
XX This polynucleotide sequence represents a human oligonucleotide relating
XX to the TNFR1 of the invention
XX
SQ Sequence 18 BP; 7 A; 5 C; 2 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 990 CATTGTTTGGGAATC 1007
DB 18 CATTGTTTGGGAATC 1
RESULT 69
ABT05020/c
ID ABT05020 standard; DNA; 18 BP.
AC ABT05020;
XX
DT 11-OCT-2002 (first entry)
TNFR1 expression modulation related antisense oligo SEQ ID No 50.
XX
DE Antisense compound; tumour necrosis factor receptor 1; liver disease;
KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
KW human; ds.
XX
OS Homo sapiens.
XX
PN WO200248168-A1.
XX
PD 20-JUN-2002.
XX
PF 22-OCT-2001; 2001WO-US051224.
XX
PR 24-OCT-2000; 2000US-00695451.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Baker BF, Cowsett LM, Zhang H, Dean NM;
XX
DR WPI; 2002-583481/62.
XX
PT Novel antisense compound targeted to nucleic acid molecule encoding tumor
XX PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
XX PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX PS Example 10; Page 45; 121pp; English.
XX
XX The invention relates to an antisense compound 8 to 30 nucleotides in
XX length targeted to nucleic acid molecule encoding tumour necrosis factor
XX receptor 1 (TNFR1), where the antisense compound inhibits expression of
XX TNFR1. The antisense compound is useful for inhibiting the expression of
XX TNFR1 in cells or tissues. The antisense compound is also useful for
XX treating an animal (preferably human) having a disease or condition
XX associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
XX injury) or a hyperproliferative disorder such as cancer, by inhibiting
XX the expression of TNFR1. The antisense compound is useful for
XX diagnostics, therapeutics, prophylaxis and as research reagents and kits.
XX This polynucleotide sequence represents a human oligonucleotide relating
XX to the TNFR1 of the invention
XX
SQ Sequence 18 BP; 3 A; 4 C; 2 G; 9 T; 0 U; 0 Other;
Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 802 AGTAACTGTGAGAAAGC 819
DB 18 AGTAACTGTGAGAAAGC 1
RESULT 70
ABT05031/c
ID ABT05031 standard; DNA; 18 BP.
AC ABT05031;
XX
DT 11-OCT-2002 (first entry)
TNFR1 expression modulation related antisense oligo SEQ ID No 61.
XX
DE Antisense compound; tumour necrosis factor receptor 1; liver disease;
KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
KW human; ds.
XX
OS Homo sapiens.
XX
PN WO200248168-A1.
XX
PD 20-JUN-2002.
XX
PF 22-OCT-2001; 2001WO-US051224.
XX
PR 24-OCT-2000; 2000US-00695451.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Baker BF, Cowsett LM, Zhang H, Dean NM;
XX
DR WPI; 2002-583481/62.
XX
PT Novel antisense compound targeted to nucleic acid molecule encoding tumor
XX PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
XX PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX PS Example 10; Page 45; 121pp; English.
XX
XX The invention relates to an antisense compound 8 to 30 nucleotides in
XX length targeted to nucleic acid molecule encoding tumour necrosis factor
XX receptor 1 (TNFR1), where the antisense compound inhibits expression of
XX TNFR1. The antisense compound is useful for inhibiting the expression of
XX TNFR1 in cells or tissues. The antisense compound is also useful for
XX treating an animal (preferably human) having a disease or condition
XX associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
XX injury) or a hyperproliferative disorder such as cancer, by inhibiting
XX the expression of TNFR1. The antisense compound is useful for
XX diagnostics, therapeutics, prophylaxis and as research reagents and kits.
XX This polynucleotide sequence represents a human oligonucleotide relating
XX to the TNFR1 of the invention
XX
```



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SQ Sequence 18 BP; 3 A; 4 C; 3 G; 8 T; 0 U; 0 Other;
  Query Match      0.8%; Score 18; DB 1; Length 18;
  Best Local Similarity 100.0%; Pred. No. 20;
  Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1033 GAAGGAAGTACTACTAAG 1050
  |||||
Db 18 GAAGGAAGTACTACTAAG 1

RESULT 71
ABT05039/c
ID ABT05039 standard; DNA; 18 BP.
XX AC
XX DT 11-OCT-2002 (first entry)
XX TNFR1 expression modulation related antisense oligo SEQ ID No 70.
XX
XX Antisense compound; tumour necrosis factor receptor 1; liver disease;
XX TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
XX human; ds.
XX Homo sapiens.
XX OS
XX PN WC200248168-A1.
XX XX
XX PD 20-JUN-2002.
XX XX
XX DT 22-OCT-2001; 2001WO-US051224.
XX XX
XX PF 24-OCT-2000; 2000US-00695451.
XX PR
XX PA (ISIS-) ISIS PHARM INC.
XX PI Baker BF, Cowseert LM, Zhang H, Dean NM;
XX PI WPI; 2002-583481/62.
XX DR
XX PT Novel antisense compound targeted to nucleic acid molecule encoding tumor
XX necrosis factor receptor 1 (TNFR1), useful for treating humans having
XX disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX Example 10; Page 45; 121pp; English.
XX PS
XX CC The invention relates to an antisense compound 8 to 30 nucleotides in
XX length targeted to nucleic acid molecule encoding tumour necrosis factor
XX receptor 1 (TNFR1), where the antisense compound inhibits expression of
XX TNFR1. The antisense compound is useful for inhibiting the expression of
XX TNFR1 in cells or tissues. The antisense compound is also useful for
XX treating an animal (preferably human) having a disease or condition
XX associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
XX injury) or a hyperproliferative disorder such as cancer, by inhibiting
XX the expression of TNFR1. The antisense compound is useful for
XX diagnostics, therapeutics, prophylaxis and as research reagents and kits.
XX This polynucleotide sequence represents a human oligonucleotide relating
XX to the TNFR1 of the invention
XX PS Sequence 18 BP; 1 A; 3 C; 8 G; 6 T; 0 U; 0 Other;
  Query Match      0.8%; Score 18; DB 1; Length 18;
  Best Local Similarity 100.0%; Pred. No. 20;
  Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1290 CCACAGGCCACAGAGCCT 1307
  |||||
Db 18 CCACAGGCCACAGAGCCT 1

RESULT 73
ABT05096/c
ID ABT05096 standard; DNA; 18 BP.
XX AC
XX DT 11-OCT-2002 (first entry)
XX TNFR1 expression modulation related antisense oligo SEQ ID No 126.
XX
XX Antisense compound; tumour necrosis factor receptor 1; liver disease;
XX TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
XX human; ds.
XX Homo sapiens.
XX OS

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XX WO200248168-A1.  
XX 20-JUN-2002.  
XX 22-OCT-2001; 2001WO-US051224.  
XX 24-OCT-2000; 2000US-00695451.  
XX (ISIS-) ISIS PHARM INC.  
XX Baker BF, Cowsett LM, Zhang H, Dean NM;  
XX WPI; 2002-583481/62.  
XX Novel antisense compound targeted to nucleic acid molecule encoding tumor  
XX necrosis factor receptor 1 (TNFR1), useful for treating humans having  
XX disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.  
XX Example 18; Page 56; 121pp; English.  
XX The invention relates to an antisense compound 8 to 30 nucleotides in  
XX length targeted to nucleic acid molecule encoding tumour necrosis factor  
XX receptor 1 (TNFR1), where the antisense compound inhibits expression of  
XX TNFR1. The antisense compound is useful for inhibiting the expression of  
XX TNFR1 in cells or tissues. The antisense compound is also useful for  
XX treating an animal (preferably human) having a disease or condition  
XX associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver  
XX injury) or a hyperproliferative disorder such as cancer, by inhibiting  
XX the expression of TNFR1. The antisense compound is useful for  
XX diagnostics, therapeutics, prophylaxis and as research reagents and kits.  
XX This polynucleotide sequence represents a human oligonucleotide relating  
XX to the TNFR1 of the invention  
XX Sequence 18 BP; 9 A; 1 C; 7 G; 1 T; 0 U; 0 Other;  
XX Query Match 0.8%; Score 18; DB 1; Length 18;  
XX Best Local Similarity 100.0%; Pred.No. 20;  
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
XX  
XX QY 919 CTTTGCCCTTTATCCCTC 936  
XX 18 CTTTGCCCTTTATCCCTC 1  
XX  
XX RESULT 74  
XX ABT05113/c  
XX ID ABT05113 standard; DNA; 18 BP.  
XX AC ABT05113;  
XX 11-OCT-2002 (first entry)  
XX TNFR1 expression modulation related antisense oligo SEQ ID No 143.  
XX Antisense compound; tumour necrosis factor receptor 1; liver disease;  
XX TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;  
XX human; ds.  
XX Homo sapiens.  
XX OS  
XX WO200248168-A1.  
XX 20-JUN-2002.  
XX 22-OCT-2001; 2001WO-US051224.  
XX (ISIS-) ISIS PHARM INC.  
XX Baker BF, Cowsett LM, Zhang H, Dean NM;

DR WPI; 2002-583481/62.  
XX Novel antisense compound targeted to nucleic acid molecule encoding tumor  
XX necrosis factor receptor 1 (TNFR1), useful for treating humans having  
XX disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.  
XX Example 18; Page 56; 121pp; English.  
XX The invention relates to an antisense compound 8 to 30 nucleotides in  
XX length targeted to nucleic acid molecule encoding tumour necrosis factor  
XX receptor 1 (TNFR1), where the antisense compound inhibits expression of  
XX TNFR1. The antisense compound is useful for inhibiting the expression of  
XX TNFR1 in cells or tissues. The antisense compound is also useful for  
XX treating an animal (preferably human) having a disease or condition  
XX associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver  
XX injury) or a hyperproliferative disorder such as cancer, by inhibiting  
XX the expression of TNFR1. The antisense compound is useful for  
XX diagnostics, therapeutics, prophylaxis and as research reagents and kits.  
XX This polynucleotide sequence represents a human oligonucleotide relating  
XX to the TNFR1 of the invention  
XX Sequence 18 BP; 1 A; 3 C; 7 G; 7 T; 0 U; 0 Other;  
XX Query Match 0.8%; Score 18; DB 1; Length 18;  
XX Best Local Similarity 100.0%; Pred.No. 20;  
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
XX  
XX QY 1291 CACAAGCCACAGAGCCTA 1308  
XX 18 CACAAGCCACAGAGCCTA 1  
XX  
XX RESULT 75  
XX ABT05028/c  
XX ID ABT05028 standard; DNA; 18 BP.  
XX AC ABT05028;  
XX 11-OCT-2002 (first entry)  
XX TNFR1 expression modulation related antisense oligo SEQ ID No 58.  
XX Antisense compound; tumour necrosis factor receptor 1; liver disease;  
XX TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;  
XX human; ds.  
XX Homo sapiens.  
XX OS  
XX WO200248168-A1.  
XX 20-JUN-2002.  
XX 22-OCT-2001; 2001WO-US051224.  
XX 24-OCT-2000; 2000US-00695451.  
XX (ISIS-) ISIS PHARM INC.  
XX Baker BF, Cowsett LM, Zhang H, Dean NM;  
XX WPI; 2002-583481/62.  
XX Novel antisense compound targeted to nucleic acid molecule encoding tumor  
XX necrosis factor receptor 1 (TNFR1), useful for treating humans having  
XX disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.  
XX Example 10; Page 45; 121pp; English.  
XX The invention relates to an antisense compound 8 to 30 nucleotides in  
XX length targeted to nucleic acid molecule encoding tumour necrosis factor  
XX receptor 1 (TNFR1), where the antisense compound inhibits expression of  
XX TNFR1 in cells or tissues. The antisense compound is useful for inhibiting the expression of  
XX TNFR1 in cells or tissues. The antisense compound is also useful for  
XX TNFR1 in cells or tissues. The antisense compound is also useful for

CC treating an animal (preferably human) having a disease or condition  
CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver  
CC injury) or a hyperproliferative disorder such as cancer, by inhibiting  
CC the expression of TNFR1. The antisense compound is useful for  
CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.  
CC This polynucleotide sequence represents a human oligonucleotide relating  
CC to the TNFR1 of the invention  
XX  
SQ Sequence 18 BP; 9 A; 2 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;  
Best Local Similarity 100.0%; Pred. No. 20;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 935 TCCTCTTCATTCGTTTAA 952  
Db 18 TCCTCTTCATTCGTTTAA 1

RESULT 76  
ABT05087/c  
ID ABT05087 standard; DNA; 18 BP.  
XX  
AC ABT05087;  
XX  
DT 11-OCT-2002 (first entry)  
XX  
TNFR1 expression modulation related antisense oligo SEQ ID No 117.  
DE  
XX Antisense compound; tumour necrosis factor receptor 1; liver disease;  
XX TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;  
XX human; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO200248168-A1.  
XX  
PD 20-JUN-2002.  
XX  
PF 22-OCT-2001; 2001WO-US051224.  
XX  
PR 24-OCT-2000; 2000US-00695451.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Baker BF, Cowser LM, Zhang H, Dean NM;  
XX WPI; 2002-583481/62.  
XX

XX The invention relates to an antisense compound 8 to 30 nucleotides in  
XX length targeted to nucleic acid molecule encoding tumour necrosis factor  
XX receptor 1 (TNFR1), where the antisense compound inhibits expression of  
XX TNFR1. The antisense compound is useful for inhibiting the expression of  
XX TNFR1 in cells or tissues. The antisense compound is also useful for  
XX treating an animal (preferably human) having a disease or condition  
XX associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver  
XX injury) or a hyperproliferative disorder such as cancer, by inhibiting  
XX the expression of TNFR1. The antisense compound is useful for  
XX diagnostics, therapeutics, prophylaxis and as research reagents and kits.  
XX This polynucleotide sequence represents a human oligonucleotide relating  
XX to the TNFR1 of the invention  
XX  
SQ Sequence 18 BP; 3 A; 4 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;  
Best Local Similarity 100.0%; Pred. No. 20;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 803 GTAACCTGAAGAAAGCC 820  
Db 18 GTAACCTGAAGAAAGCC 1

RESULT 77  
ABT05094/c  
ID ABT05094 standard; DNA; 18 BP.  
XX  
AC ABT05094;  
XX  
DT 11-OCT-2002 (first entry)  
XX  
TNFR1 expression modulation related antisense oligo SEQ ID No 124.

XX Antisense compound; tumour necrosis factor receptor 1; liver disease;  
XX TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;  
XX human; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO200248168-A1.  
XX  
PD 20-JUN-2002.  
XX  
PF 22-OCT-2001; 2001WO-US051224.  
XX  
PR 24-OCT-2000; 2000US-00695451.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Baker BF, Cowser LM, Zhang H, Dean NM;  
XX WPI; 2002-583481/62.  
XX

XX Novel antisense compound targeted to nucleic acid molecule encoding tumour  
XX necrosis factor receptor 1 (TNFR1), useful for treating humans having  
XX disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.  
XX  
XX Example 18; Page 56; 121pp; English.

XX The invention relates to an antisense compound 8 to 30 nucleotides in  
XX length targeted to nucleic acid molecule encoding tumour necrosis factor  
XX receptor 1 (TNFR1), where the antisense compound inhibits expression of  
XX TNFR1. The antisense compound is useful for inhibiting the expression of  
XX TNFR1 in cells or tissues. The antisense compound is also useful for  
XX treating an animal (preferably human) having a disease or condition  
XX associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver  
XX injury) or a hyperproliferative disorder such as cancer, by inhibiting  
XX the expression of TNFR1. The antisense compound is useful for  
XX diagnostics, therapeutics, prophylaxis and as research reagents and kits.  
XX This polynucleotide sequence represents a human oligonucleotide relating  
XX to the TNFR1 of the invention  
XX  
SQ Sequence 18 BP; 10 A; 3 C; 4 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;  
Best Local Similarity 100.0%; Pred. No. 20;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 915 TGGTCTTTCGCTTTTATC 932  
Db 18 TGGTCTTTCGCTTTTATC 1

RESULT 78  
ABT05097/c  
ID ABT05097 standard; DNA; 18 BP.  
XX  
AC ABT05097;  
XX  
DT 11-OCT-2002 (first entry)

XX TNFR1 expression modulation related antisense oligo SEQ ID No 127.  
 DE Antisense compound; tumour necrosis factor receptor 1; liver disease;  
 KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;  
 KW human; ds.  
 XX Homo sapiens.  
 XX WO200248168-A1.  
 XX 20-JUN-2002.  
 XX 22-OCT-2001; 2001WO-US051224.  
 XX 24-OCT-2000; 2000US-00695451.  
 XX (ISIS-) ISIS PHARM INC.  
 XX Baker BF, Cowser LM, Zhang H, Dean NM;  
 XX WPI; 2002-583481/62.  
 XX Novel antisense compound targeted to nucleic acid molecule encoding tumor  
 PT necrosis factor receptor 1 (TNFR1), useful for treating humans having  
 PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.  
 XX Example 18; Page 56; 121pp; English.  
 XX The invention relates to an antisense compound 8 to 30 nucleotides in  
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor  
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of  
 CC TNFR1. The antisense compound is useful for inhibiting the expression of  
 CC TNFR1 in cells or tissues. The antisense compound is also useful for  
 CC treating an animal (preferably human) having a disease or condition  
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver  
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting  
 CC the expression of TNFR1. The antisense compound is useful for  
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.  
 CC This polynucleotide sequence represents a human oligonucleotide relating  
 CC to the TNFR1 of the invention  
 XX Sequence 18 BP; 8 A; 1 C; 8 G; 1 T; 0 U; 0 Other;  
 SQ Query Match 0.8%; Score 18; DB 1; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 20;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 923 GCCTTTATCCCTCTCT 940  
 DB 18 GCCTTTATCCCTCTCT 1  
 RESULT 79  
 ABT05024/c  
 ID ABT05024 standard; DNA; 18 BP.  
 XX AC  
 XX ABT05024;  
 DT 11-OCT-2002 (first entry)  
 XX TNFR1 expression modulation related antisense oligo SEQ ID No 54.  
 DE Antisense compound; tumour necrosis factor receptor 1; liver disease;  
 KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;  
 KW human; ds.  
 XX Homo sapiens.  
 XX WO200248168-A1.  
 XX 20-JUN-2002.  
 XX

PF 22-OCT-2001; 2001WO-US051224.  
 XX 24-OCT-2000; 2000US-00695451.  
 XX (ISIS-) ISIS PHARM INC.  
 XX Baker BF, Cowser LM, Zhang H, Dean NM;  
 XX WPI; 2002-583481/62.  
 XX Novel antisense compound targeted to nucleic acid molecule encoding tumor  
 PT necrosis factor receptor 1 (TNFR1), useful for treating humans having  
 PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.  
 XX Example 10; Page 45; 121pp; English.  
 XX The invention relates to an antisense compound 8 to 30 nucleotides in  
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor  
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of  
 CC TNFR1. The antisense compound is useful for inhibiting the expression of  
 CC TNFR1 in cells or tissues. The antisense compound is also useful for  
 CC treating an animal (preferably human) having a disease or condition  
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver  
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting  
 CC the expression of TNFR1. The antisense compound is useful for  
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.  
 CC This polynucleotide sequence represents a human oligonucleotide relating  
 CC to the TNFR1 of the invention  
 XX Sequence 18 BP; 11 A; 3 C; 3 G; 1 T; 0 U; 0 Other;  
 SQ Query Match 0.8%; Score 18; DB 1; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 20;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 906 CATTTCTTTGGCTTTG 923  
 DB 18 CATTTCTTTGGCTTTG 1  
 RESULT 80  
 ABT05027/c  
 ID ABT05027 standard; DNA; 18 BP.  
 XX AC  
 XX ABT05027;  
 DT 11-OCT-2002 (first entry)  
 XX TNFR1 expression modulation related antisense oligo SEQ ID No 57.  
 DE Antisense compound; tumour necrosis factor receptor 1; liver disease;  
 KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;  
 KW human; ds.  
 XX Homo sapiens.  
 XX WO200248168-A1.  
 XX 20-JUN-2002.  
 XX 22-OCT-2001; 2001WO-US051224.  
 XX 24-OCT-2000; 2000US-00695451.  
 XX (ISIS-) ISIS PHARM INC.  
 XX Baker BF, Cowser LM, Zhang H, Dean NM;  
 XX WPI; 2002-583481/62.  
 XX Novel antisense compound targeted to nucleic acid molecule encoding tumor  
 PT necrosis factor receptor 1 (TNFR1), useful for treating humans having  
 PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.  
 XX

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XX
PS Example 10; Page 45; 121pp; English.
CC The invention relates to an antisense compound 8 to 30 nucleotides in
CC length targeted to nucleic acid molecule encoding tumour necrosis factor
CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
CC TNFR1. The antisense compound is useful for inhibiting the expression of
CC TNFR1 in cells or tissues. The antisense compound is also useful for
CC treating an animal (preferably human) having a disease or condition
CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
CC the expression of TNFR1. The antisense compound is useful for
CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
CC This polynucleotide sequence represents a human oligonucleotide relating
CC to the TNFR1 of the invention
XX
SQ Sequence 18 BP; 8 A; 1 C; 7 G; 2 T; 0 U; 0 Other;
Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 929 TATCCCTCCCTTCATTG 946
Db 18 TATCCCTCCCTTCATTG 1
|||||
|||||

RESULT 81
ABT05030/c
ID ABT05030 standard; DNA; 18 BP.
XX
AC ABT05030;
XX
DT 11-OCT-2002 (first entry)
XX
DE TNFR1 expression modulation related antisense oligo SEQ ID No 60.
XX
KW Antisense compound; tumour necrosis factor receptor 1; liver disease;
KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
KW human; ds.
XX
OS Homo sapiens.
XX
PN WO200248168-A1.
XX
PD 20-JUN-2002.
XX
PF 22-OCT-2001; 2001WO-US051224.
XX
PR 24-OCT-2000; 2000US-00695451.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Baker BF, Cowsett LM, Zhang H, Dean NM;
XX
PS WPI; 2002-583481/62.
XX
DR
XX
PT Novel antisense compound targeted to nucleic acid molecule encoding tumor
PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX
PS Example 10; Page 45; 121pp; English.
XX
CC The invention relates to an antisense compound 8 to 30 nucleotides in
CC length targeted to nucleic acid molecule encoding tumour necrosis factor
CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
CC TNFR1. The antisense compound is useful for inhibiting the expression of
CC TNFR1 in cells or tissues. The antisense compound is also useful for
CC treating an animal (preferably human) having a disease or condition
CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
CC the expression of TNFR1. The antisense compound is useful for
CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
CC This polynucleotide sequence represents a human oligonucleotide relating
CC to the TNFR1 of the invention
XX
SQ Sequence 18 BP; 8 A; 1 C; 7 G; 2 T; 0 U; 0 Other;
Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 929 TATCCCTCCCTTCATTG 946
Db 18 TATCCCTCCCTTCATTG 1
|||||
|||||

RESULT 82
ABT05038/c
ID ABT05038 standard; DNA; 18 BP.
XX
AC ABT05038;
XX
DT 11-OCT-2002 (first entry)
XX
DE TNFR1 expression modulation related antisense oligo SEQ ID No 68.
XX
KW Antisense compound; tumour necrosis factor receptor 1; liver disease;
KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
KW human; ds.
XX
OS Homo sapiens.
XX
PN WO200248168-A1.
XX
PD 20-JUN-2002.
XX
PF 22-OCT-2001; 2001WO-US051224.
XX
PR 24-OCT-2000; 2000US-00695451.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Baker BF, Cowsett LM, Zhang H, Dean NM;
XX
PS WPI; 2002-583481/62.
XX
DR
XX
PT Novel antisense compound targeted to nucleic acid molecule encoding tumor
PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX
PS Example 10; Page 45; 121pp; English.
XX
CC The invention relates to an antisense compound 8 to 30 nucleotides in
CC length targeted to nucleic acid molecule encoding tumour necrosis factor
CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
CC TNFR1. The antisense compound is useful for inhibiting the expression of
CC TNFR1 in cells or tissues. The antisense compound is also useful for
CC treating an animal (preferably human) having a disease or condition
CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
CC the expression of TNFR1. The antisense compound is useful for
CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
CC This polynucleotide sequence represents a human oligonucleotide relating
CC to the TNFR1 of the invention
XX
SQ Sequence 18 BP; 1 A; 7 C; 6 G; 4 T; 0 U; 0 Other;
Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1184 CCCGACAGAGGTGGCAC 1201
Db 18 CCCGACAGAGGTGGCAC 1
|||||
|||||
```





RESULT 89





CC injury) or a hyperproliferative disorder such as cancer, by inhibiting  
 CC the expression of TNFR1. The antisense compound is useful for  
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.  
 CC This polynucleotide sequence represents a human oligonucleotide relating  
 CC to the TNFR1 of the invention

XX SQ Sequence 18 BP; 4 A; 4 C; 8 G; 2 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 18; DB 1; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 20;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1098 CACCTCGGCTTCAGTCC 1115  
 DB 18 CACCTCGGCTTCAGTCC 1

## RESULT 93

ABT05083/c  
 ID ABT05083 standard; DNA; 18 BP.  
 XX AC ABT05083;  
 XX DT 11-OCT-2002 (first entry)  
 XX TNFR1 expression modulation related antisense oligo SEQ ID No 113.  
 XX Antisense compound; tumour necrosis factor receptor 1; liver disease;  
 KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;  
 KW human; ds.  
 XX OS Homo sapiens.  
 XX PN WO200248168-A1.  
 XX PD 20-JUN-2002.  
 XX PF 22-OCT-2001; 2001WO-US051224.  
 XX PA (ISIS-) ISIS PHARM INC.  
 XX PI Baker BF, Cowser LM, Zhang H, Dean NM;  
 XX WPI; 2002-583481/62.

CC The invention relates to an antisense compound 8 to 30 nucleotides in  
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor  
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of  
 CC TNFR1. The antisense compound is useful for inhibiting the expression of  
 CC TNFR1 in cells or tissues. The antisense compound is also useful for  
 CC treating an animal (preferably human) having a disease or condition  
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis or liver  
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting  
 CC the expression of TNFR1. The antisense compound is useful for  
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.  
 CC This polynucleotide sequence represents a human oligonucleotide relating  
 CC to the TNFR1 of the invention

XX SQ Sequence 18 BP; 0 A; 5 C; 4 G; 9 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 20;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 731 AGGAGAACAGACACCG 748

DB 18 AGGAGAACAGACACCG 1

## RESULT 94

ABT05023/c  
 ID ABT05023 standard; DNA; 18 BP.  
 XX AC ABT05023;  
 XX DT 11-OCT-2002 (first entry)  
 XX TNFR1 expression modulation related antisense oligo SEQ ID No 53.  
 XX Antisense compound; tumour necrosis factor receptor 1; liver disease;  
 KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;  
 KW human; ds.  
 XX OS Homo sapiens.  
 XX PN WO200248168-A1.  
 XX PD 20-JUN-2002.  
 XX PF 22-OCT-2001; 2001WO-US051224.  
 XX PA (ISIS-) ISIS PHARM INC.  
 XX PI Baker BF, Cowser LM, Zhang H, Dean NM;  
 XX WPI; 2002-583481/62.

CC Novel antisense compound targeted to nucleic acid molecule encoding tumor  
 CC necrosis factor receptor 1 (TNFR1), useful for treating humans having  
 CC disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.  
 CC Example 10; Page 45; 121pp; English.  
 CC The invention relates to an antisense compound 8 to 30 nucleotides in  
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor  
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of  
 CC TNFR1. The antisense compound is useful for inhibiting the expression of  
 CC TNFR1 in cells or tissues. The antisense compound is also useful for  
 CC treating an animal (preferably human) having a disease or condition  
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver  
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting  
 CC the expression of TNFR1. The antisense compound is useful for  
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.  
 CC This polynucleotide sequence represents a human oligonucleotide relating  
 CC to the TNFR1 of the invention

XX SQ Sequence 18 BP; 2 A; 5 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 20;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 873 GGACTCAGGCACACAGT 890  
 DB 18 GGACTCAGGCACACAGT 1

## RESULT 95

ABT05025/c  
 ID ABT05025 standard; DNA; 18 BP.  
 XX AC ABT05025;  
 XX DT 11-OCT-2002 (first entry)  
 XX TNFR1 expression modulation related antisense oligo SEQ ID No 55.

```
XX Antisense compound; tumour necrosis factor receptor 1; liver disease;
KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
KW human; ds.
XX Homo sapiens.
XX OS
XX WO200248168-A1.
XX PN
XX XX
XX 20-JUN-2002.
XX PD
XX PF
XX 22-OCT-2001; 2001WO-US051224.
XX PP
XX 24-OCT-2000; 2000US-00695451.
XX PR
XX PA (ISIS-) ISIS PHARM INC.
XX PI Baker BF, Cowsett LM, Zhang H, Dean NM;
XX PT WPI; 2002-583481/62.
XX PS
XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
XX necrosis factor receptor 1 (TNFR1), useful for treating humans having
XX disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX Example 10; Page 45; 121pp; English.
XX The invention relates to an antisense compound 8 to 30 nucleotides in
XX length targeted to nucleic acid molecule encoding tumour necrosis factor
XX receptor 1 (TNFR1), where the antisense compound inhibits expression of
XX TNFR1. The antisense compound is useful for inhibiting the expression of
XX TNFR1 in cells or tissues. The antisense compound is also useful for
XX treating an animal (preferably human) having a disease or condition
XX associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
XX injury) or a hyperproliferative disorder such as cancer, by inhibiting
XX the expression of TNFR1. The antisense compound is useful for
XX diagnostics, therapeutics, prophylaxis and as research reagents and kits.
XX This polynucleotide sequence represents a human oligonucleotide relating
XX to the TNFR1 of the invention
XX SQ Sequence 18 BP; 11 A; 3 C; 4 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 18; DB 1; Length 18;
XX Best Local Similarity 100.0%; Pred. No. 20;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 911 TCTTTGGTCTTTGCTTT 928
XX Db 18 TCTTTGGTCTTTGCTTT 1
XX
XX RESULT 96
XX ABT05090/c
XX ID ABT05090 standard; DNA; 18 BP.
XX AC
XX ABT05090;
XX 11-OCT-2002 (first entry)
XX DT
XX TNFR1 expression modulation related antisense oligo SEQ ID No 120.
XX DE
XX Antisense compound; tumour necrosis factor receptor 1; liver disease;
XX TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
XX human; ds.
XX Homo sapiens.
XX OS
XX WO200248168-A1.
XX PN
XX XX
XX 20-JUN-2002.
XX PD
XX PF
XX 22-OCT-2001; 2001WO-US051224.
XX PP
```

```
PR 24-OCT-2000; 2000US-00695451.
XX (ISIS-) ISIS PHARM INC.
XX Baker BF, Cowsett LM, Zhang H, Dean NM;
XX WPI; 2002-583481/62.
XX DR
XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
XX necrosis factor receptor 1 (TNFR1), useful for treating humans having
XX disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX Example 18; Page 56; 121pp; English.
XX The invention relates to an antisense compound 8 to 30 nucleotides in
XX length targeted to nucleic acid molecule encoding tumour necrosis factor
XX receptor 1 (TNFR1), where the antisense compound inhibits expression of
XX TNFR1. The antisense compound is useful for inhibiting the expression of
XX TNFR1 in cells or tissues. The antisense compound is also useful for
XX treating an animal (preferably human) having a disease or condition
XX associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
XX injury) or a hyperproliferative disorder such as cancer, by inhibiting
XX the expression of TNFR1. The antisense compound is useful for
XX diagnostics, therapeutics, prophylaxis and as research reagents and kits.
XX This polynucleotide sequence represents a human oligonucleotide relating
XX to the TNFR1 of the invention
XX SQ Sequence 18 BP; 9 A; 3 C; 5 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 18; DB 1; Length 18;
XX Best Local Similarity 100.0%; Pred. No. 20;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 899 CCTGTGTCATTCTTTG 916
XX Db 18 CCTGTGTCATTCTTTG 1
XX
XX RESULT 97
XX ABT05099/c
XX ID ABT05099 standard; DNA; 18 BP.
XX AC
XX ABT05099;
XX 11-OCT-2002 (first entry)
XX DT
XX TNFR1 expression modulation related antisense oligo SEQ ID No 129.
XX DE
XX Antisense compound; tumour necrosis factor receptor 1; liver disease;
XX TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
XX human; ds.
XX Homo sapiens.
XX OS
XX WO200248168-A1.
XX PN
XX 20-JUN-2002.
XX PD
XX 22-OCT-2001; 2001WO-US051224.
XX PF
XX 24-OCT-2000; 2000US-00695451.
XX PR
XX (ISIS-) ISIS PHARM INC.
XX PA
XX Baker BF, Cowsett LM, Zhang H, Dean NM;
XX WPI; 2002-583481/62.
XX PI
XX DR
XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
XX necrosis factor receptor 1 (TNFR1), useful for treating humans having
XX disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX Example 18; Page 56; 121pp; English.
XX PS
```

XX The invention relates to an antisense compound 8 to 30 nucleotides in  
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor  
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of  
 CC TNFR1. The antisense compound is useful for inhibiting the expression of  
 CC TNFR1 in cells or tissues. The antisense compound is also useful for  
 CC treating an animal (preferably human) having a disease or condition  
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver  
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting  
 CC the expression of TNFR1. The antisense compound is useful for  
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.  
 CC This polynucleotide sequence represents a human oligonucleotide relating  
 CC to the TNFR1 of the invention

XX Sequence 18 BP; 9 A; 0 C; 7 G; 2 T; 0 U; 0 Other;  
 SQ Query Match 0.8%; Score 18; DB 1; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 20;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 927 TTTATCCCTCCTCTTCAT 944  
 DB 18 TTTATCCCTCCTCTTCAT 1

RESULT 98  
 ABT05018/c  
 ID ABT05018 standard; DNA; 18 BP.  
 AC ABT05018;  
 XX 11-OCT-2002 (first entry)  
 DE TNFR1 expression modulation related antisense oligo SEQ ID No 48.  
 KW Antisense compound; tumour necrosis factor receptor 1; liver disease;  
 KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;  
 KW human; ds.  
 XX Homo sapiens.  
 OS WO200248168-A1.  
 PN 20-JUN-2002.  
 PD 22-OCT-2001; 2001WO-US051224.  
 PF 24-OCT-2000; 2000US-00695451.  
 PR (ISIS-) ISIS PHARM INC.  
 PA Baker BF, Cowsett LM, Zhang H, Dean NM;  
 PI WPI; 2002-583481/62.  
 DR Novel antisense compound targeted to nucleic acid molecule encoding tumor  
 PT necrosis factor receptor 1 (TNFR1), useful for treating humans having  
 PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.  
 XX Example 10; Page 45; 121pp; English.

XX The invention relates to an antisense compound 8 to 30 nucleotides in  
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor  
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of  
 CC TNFR1. The antisense compound is useful for inhibiting the expression of  
 CC TNFR1 in cells or tissues. The antisense compound is also useful for  
 CC treating an animal (preferably human) having a disease or condition  
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver  
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting  
 CC the expression of TNFR1. The antisense compound is useful for  
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.  
 CC This polynucleotide sequence represents a human oligonucleotide relating  
 CC to the TNFR1 of the invention

XX Sequence 18 BP; 6 A; 6 C; 4 G; 2 T; 0 U; 0 Other;  
 SQ Query Match 0.8%; Score 18; DB 1; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 20;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 786 CGAGTGTGTCCTCCGTAG 803  
 DB 18 CGAGTGTGTCCTCCGTAG 1

RESULT 99  
 ABT05089/c  
 ID ABT05089 standard; DNA; 18 BP.  
 XX ABT05089;  
 AC ABT05089;  
 XX 11-OCT-2002 (first entry)  
 DE TNFR1 expression modulation related antisense oligo SEQ ID No 119.  
 KW Antisense compound; tumour necrosis factor receptor 1; liver disease;  
 KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;  
 KW human; ds.  
 XX Homo sapiens.  
 OS WO200248168-A1.  
 PN 20-JUN-2002.  
 PD 22-OCT-2001; 2001WO-US051224.  
 PF 24-OCT-2000; 2000US-00695451.  
 PR (ISIS-) ISIS PHARM INC.  
 PA Baker BF, Cowsett LM, Zhang H, Dean NM;  
 PI WPI; 2002-583481/62.  
 DR Novel antisense compound targeted to nucleic acid molecule encoding tumor  
 PT necrosis factor receptor 1 (TNFR1), useful for treating humans having  
 PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.  
 XX Example 18; Page 56; 121pp; English.

XX The invention relates to an antisense compound 8 to 30 nucleotides in  
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor  
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of  
 CC TNFR1. The antisense compound is useful for inhibiting the expression of  
 CC TNFR1 in cells or tissues. The antisense compound is also useful for  
 CC treating an animal (preferably human) having a disease or condition  
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver  
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting  
 CC the expression of TNFR1. The antisense compound is useful for  
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.  
 CC This polynucleotide sequence represents a human oligonucleotide relating  
 CC to the TNFR1 of the invention

XX Sequence 18 BP; 5 A; 4 C; 2 G; 7 T; 0 U; 0 Other;  
 SQ Query Match 0.8%; Score 18; DB 1; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 20;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 846 CCAGATTGAGATGTAA 863  
 DB 18 CCAGATTGAGATGTAA 1

RESULT 100

```

ABT05110/c
ID  ABT05110 standard; DNA; 18 BP.
XX
AC  ABT05110;
XX
XX
DT  11-OCT-2002 (first entry)
XX
DE  TNFR1 expression modulation related antisense oligo SEQ ID No 140.
XX
KW  Antisense compound; tumour necrosis factor receptor 1; liver disease;
KW  TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
KW  human; ds.
XX
OS  Homo sapiens.
XX
XX  WO200248168-A1.
XX
PD  20-JUN-2002.
XX
PF  22-OCT-2001; 2001WO-US051224.
XX
PR  24-OCT-2000; 2000US-00695451.
XX
PA  (ISIS-) ISIS PHARM INC.
XX
XX  Baker BF, Cowseert LM, Zhang H, Dean NM;
XX  WPI; 2002-583481/62.
XX
PD  Novel antisense compound targeted to nucleic acid molecule encoding tumor
PT  necrosis factor receptor 1 (TNFR1), useful for treating humans having
PT  disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX
PS  Example 18; Page 56; 121pp; English.
XX
CC  The invention relates to an antisense compound 8 to 30 nucleotides in
CC  length targeted to nucleic acid molecule encoding tumour necrosis factor
CC  receptor 1 (TNFR1), where the antisense compound inhibits expression of
CC  TNFR1. The antisense compound is useful for inhibiting the expression of
CC  TNFR1 in cells or tissues. The antisense compound is also useful for
CC  treating an animal (preferably human) having a disease or condition
CC  associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
CC  injury) or a hyperproliferative disorder such as cancer, by inhibiting
CC  the expression of TNFR1. The antisense compound is useful for
CC  diagnostics, therapeutics, prophylaxis and as research reagents and kits.
CC  This polynucleotide sequence represents a human oligonucleotide relating
CC  to the TNFR1 of the invention
XX
SQ  Sequence 18 BP; 1 A; 9 C; 3 G; 5 T; 0 U; 0 Other;
XX
Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 1272 GAAGTGGGAGGACAGCGC 1289
DB 18 GAAGTGGGAGGACAGCGC 1
XXXXXXXXXXXXXXXXXXXX
RESULT 101
ABT05114/c
ID  ABT05114 standard; DNA; 18 BP.
XX
XX  ABT05114;
XX
DT  11-OCT-2002 (first entry)
XX
DE  TNFR1 expression modulation related antisense oligo SEQ ID No 144.
XX
KW  Antisense compound; tumour necrosis factor receptor 1; liver disease;
KW  TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
KW  human; ds.
XX
XX  Baker BF, Cowseert LM, Zhang H, Dean NM;
XX  WPI; 2002-583481/62.
XX
PD  Novel antisense compound targeted to nucleic acid molecule encoding tumor
PT  necrosis factor receptor 1 (TNFR1), useful for treating humans having
PT  disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX
PS  Example 18; Page 56; 121pp; English.
XX
CC  The invention relates to an antisense compound 8 to 30 nucleotides in
CC  length targeted to nucleic acid molecule encoding tumour necrosis factor
CC  receptor 1 (TNFR1), where the antisense compound inhibits expression of
CC  TNFR1. The antisense compound is useful for inhibiting the expression of
CC  TNFR1 in cells or tissues. The antisense compound is also useful for
CC  treating an animal (preferably human) having a disease or condition
CC  associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
CC  injury) or a hyperproliferative disorder such as cancer, by inhibiting
CC  the expression of TNFR1. The antisense compound is useful for
CC  diagnostics, therapeutics, prophylaxis and as research reagents and kits.
CC  This polynucleotide sequence represents a human oligonucleotide relating
CC  to the TNFR1 of the invention
XX
SQ  Sequence 18 BP; 1 A; 9 C; 3 G; 5 T; 0 U; 0 Other;
XX
Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 1272 GAAGTGGGAGGACAGCGC 1289
DB 18 GAAGTGGGAGGACAGCGC 1
XXXXXXXXXXXXXXXXXXXX
RESULT 102
ABT05092/c
ID  ABT05092 standard; DNA; 18 BP.
XX
XX  ABT05092;
XX
DT  11-OCT-2002 (first entry)
XX
DE  TNFR1 expression modulation related antisense oligo SEQ ID No 122.
XX
KW  Antisense compound; tumour necrosis factor receptor 1; liver disease;
KW  TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
KW  human; ds.
XX
XX  Homo sapiens.
XX
XX  WO200248168-A1.
XX
PD  20-JUN-2002.
XX
PF  22-OCT-2001; 2001WO-US051224.
XX
PR  24-OCT-2000; 2000US-00695451.
XX
PA  (ISIS-) ISIS PHARM INC.
XX
XX  Baker BF, Cowseert LM, Zhang H, Dean NM;
XX  WPI; 2002-583481/62.
XX
PD  Novel antisense compound targeted to nucleic acid molecule encoding tumor
PT  necrosis factor receptor 1 (TNFR1), useful for treating humans having
PT  disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX
PS  Example 18; Page 56; 121pp; English.
XX
CC  The invention relates to an antisense compound 8 to 30 nucleotides in
CC  length targeted to nucleic acid molecule encoding tumour necrosis factor
CC  receptor 1 (TNFR1), where the antisense compound inhibits expression of
CC  TNFR1. The antisense compound is useful for inhibiting the expression of
CC  TNFR1 in cells or tissues. The antisense compound is also useful for
CC  treating an animal (preferably human) having a disease or condition
CC  associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
CC  injury) or a hyperproliferative disorder such as cancer, by inhibiting
CC  the expression of TNFR1. The antisense compound is useful for
CC  diagnostics, therapeutics, prophylaxis and as research reagents and kits.
CC  This polynucleotide sequence represents a human oligonucleotide relating
CC  to the TNFR1 of the invention
XX
SQ  Sequence 18 BP; 1 A; 4 C; 6 G; 7 T; 0 U; 0 Other;
XX
Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 1293 CAAGCCACAGAGCCTAGA 1310
DB 18 CAAGCCACAGAGCCTAGA 1
XXXXXXXXXXXXXXXXXXXX

```



Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 954 GTATGCTACCAACGGTG 971  
 |||||  
 Db 18 GTATGCTACCAACGGTG 1

## RESULT 105

ABV73805/c

ID ABV73805 standard; DNA; 18 BP.

XX AC

XX ABV73805;

XX 08-JAN-2003 (first entry)

XX Human tumour necrosis factor receptor p55 3' PCR primer.

XX Tumour necrosis factor; receptor; human; myelodysplastic syndrome;

XX cytostatic; vaccine; PCR; primer; ss.

XX Homo sapiens.

XX OS

XX US2002114805-A1.

XX PN

XX 22-AUG-2002.

XX PD

XX 07-DEC-2001; 2001US-00010229.

XX PR

XX 18-MAR-1991; 91US-00670827.

XX PR

XX 18-MAR-1992; 92US-00853606.

XX PR

XX 11-SEP-1992; 92US-00943852.

XX PR

XX 29-JAN-1993; 93US-00010406.

XX PR

XX 02-FEB-1993; 93US-00013413.

XX PR

XX 04-FEB-1994; 94US-00192093.

XX PR

XX 04-FEB-1994; 94US-00192102.

XX PR

XX 18-OCT-1994; 94US-00192861.

XX PR

XX 11-DEC-1995; 95US-00324799.

XX PR

XX 12-AUG-1998; 98US-00133119.

XX PR

XX 08-JAN-2001; 2001US-00756398.

XX PR

XX 10-AUG-2001; 2001US-00927703.

XX PA

XX (UNYNY-) UNIV NEW YORK MEDICAL CENT.

XX PI

XX Le J, Vilcek J, Daddona P, Ghrayeb J, Knight D, Siegel S;

XX WPI; 2002-740091/80.

XX DR

XX Treating myelodysplastic syndrome in human, involves administering tumor

XX PT necrosis factor-inhibiting amount of an anti-TNF antibody, monoclonal

XX PT antibody cA2 or anti-TNF chimeric antibody.

XX PS

XX Example 26; Page 52; 97pp; English.

XX CC

XX The present sequence is that of a 3' primer used in the construction of

XX CC tumour necrosis factor (TNF) receptor p55 heavy chain and light chain

XX CC fusion constructs. It includes the complement of the p55 Ile-159 codon.

XX CC PCR was used to amplify amino acids 3-159 or 2-159 of the p55

XX CC extracellular domain. The invention provides claimed methods of treating

XX CC a myelodysplastic syndrome using an anti-TNF antibody or a chimeric

XX CC antibody comprising variable regions (see ABP54870-71) from murine anti-

XX CC TNF monoclonal antibody A2 and a human constant region. The anti-TNF

XX CC peptides and antibodies of the invention can be used in the treatment of

XX CC TNF-related pathologies such as acute and chronic immune and autoimmune

XX CC pathologies, infections, inflammatory diseases, neurodegenerative

XX CC diseases, malignant pathologies, and alcohol-induced hepatitis

XX CC

XX Sequence 18 BP; 6 A; 3 C; 6 G; 3 T; 0 U; 0 Other;

XX SQ

Query Match 0.8%; Score 18; DB 1; Length 18;

Best Local Similarity 100.0%; Pred. No. 20;

Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 835 TTGTGCTACCCAGATT 852

|||||

Db 18 TTGTGCTACCCAGATT 1

## RESULT 106

AAI72618/c

ID AAI72618 standard; DNA; 18 BP.

XX AC

XX AAI72618;

XX 10-JUN-2002 (first entry)

XX p55 fusion protein p55 heavy chain primer #2.

XX Human; tumour necrosis factor; TNF; chimeric; antibody; cA2; primer;

XX psoriasis; immunoglobulin; G1; amplify; ss.

XX OS

XX Homo sapiens.

XX XX

XX US2002022720-A1.

XX PN

XX 21-FEB-2002.

XX PD

XX 10-AUG-2001; 2001US-00927703.

XX PF

XX 18-MAR-1991; 91US-00670827.

XX PR

XX 18-MAR-1992; 92US-00853606.

XX PR

XX 11-SEP-1992; 92US-00943852.

XX PR

XX 29-JAN-1993; 93US-00010406.

XX PR

XX 02-FEB-1993; 93US-00013413.

XX PR

XX 04-FEB-1994; 94US-00192093.

XX PR

XX 04-FEB-1994; 94US-00192102.

XX PR

XX 18-OCT-1994; 94US-00324799.

XX PR

XX 11-DEC-1995; 95US-00570674.

XX PR

XX 12-AUG-1998; 98US-00133119.

XX PR

XX 08-JAN-2001; 2001US-00756398.

XX XX

XX (UNYNY-) UNIV NEW YORK MEDICAL CENT.

XX PI

XX Le J, Vilcek J, Daddona P, Ghrayeb J, Knight D, Siegel S;

XX WPI; 2002-255676/30.

XX DR

XX Treating psoriasis in humans comprises administering anti-tumor necrosis

XX PT factor (TNF) chimeric antibody cA2, or anti-TNF chimeric antibody which

XX PT competitively inhibits binding of TNF to the antibody cA2.

XX PS

XX Example 26; Page 52; 97pp; English.

XX CC

XX The sequences given in AAI72611-19 are primers which were used in the

XX CC production of a p55 fusion protein. The fusion protein closely mimics the

XX CC structure of naturally rearranged immunoglobulin (Ig) genes. The fusion

XX CC proteins may be used in a chimeric antibody for treating psoriasis in

XX CC humans. Psoriasis may be treated by administering: (a) anti-tumour

XX CC necrosis factor (TNF) chimeric antibody (Ab); which competitively inhibits

XX CC binding of TNF to monoclonal chimeric Ab cA2; or (b) anti-TNF chimeric Ab

XX CC comprising a human immunoglobulin (Ig) G1 constant region and a non-human

XX CC variable region, which binds to an epitope included in amino acids 87 -

XX CC 108 or both 59 - 80 and 87 - 108 of a TNF sequence. The cA2 antibody has

XX CC potent TNF-inhibiting and/or neutralizing activity. Levels of cA2 as low

XX CC as 125 ng/ml completely abolished the toxic activity of TNF. The cA2

XX CC exhibited greater TNF-inhibiting activity and/or neutralizing activity

XX CC than did the parent murine A2 monoclonal antibody

XX CC

XX Sequence 18 BP; 6 A; 3 C; 6 G; 3 T; 0 U; 0 Other;

XX SQ

Query Match 0.8%; Score 18; DB 1; Length 18;

Best Local Similarity 100.0%; Pred. No. 20;

Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 835 TTGTGCTACCCAGATT 852

```

Db      18 TTGTGCTACCCAGATT 1
|||||
RESULT 107
ACA61161/c
ID      ACA61161 standard; DNA; 18 BP.
XX
AC      ACA61161;
XX
DT      11-AUG-2003 (first entry)
XX
DE      Human TNF-alpha receptor DNA construct oligonucleotide #2.
XX
KW      Human; TNF-alpha; tumour necrosis factor-alpha; gene therapy; malignancy;
KW      TNF-alpha-mediated pathology; bacterial infection; viral infection; ds;
KW      parasitic infection; chronic inflammatory disease; rheumatoid arthritis;
KW      systemic lupus erythematosus; Crohn's disease; ulcerative colitis;
KW      autoimmune disease; diabetes mellitus; Grave's disease; vascular disease;
KW      neurodegenerative disease; Alzheimer's disease; TNF-alpha receptor.
XX
OS      Homo sapiens.
OS      Synthetic.
XX
PN      US2003017584-A1.
XX
PD      23-JAN-2003.
XX
PF      08-JAN-2001; 2001US-00756398.
XX
PR      18-MAR-1991; 91US-00670827.
PR      18-MAR-1992; 92US-00853606.
PR      11-SEP-1992; 92US-00943852.
PR      29-JAN-1993; 93US-00010406.
PR      02-FEB-1993; 93US-00013413.
PR      04-FEB-1994; 94US-00013413.
PR      04-FEB-1994; 94US-00192093.
PR      04-FEB-1994; 94US-00192093.
PR      04-FEB-1994; 94US-00192102.
PR      18-OCT-1994; 94US-00324799.
PR      04-FEB-1994; 94US-00192861.
PR      18-OCT-1994; 94US-00324799.
PR      12-AUG-1998; 98US-00133119.
PR      11-DEC-1995; 95US-00570674.
PR      12-AUG-1998; 98US-00133119.
XX
PA      (CENZ ) CENTOCOR INC.
XX
PI      Le J, Vilcek J, Daddona P, Ghrayeb J, Knight D, Siegel S;
XX
WPI; 2003-401678/38.
XX
PT      New nucleic acid molecule for diagnosing or treating tumor necrosis
PT      factor alpha-mediated diseases, e.g. infections, chronic inflammatory
PT      diseases, autoimmune diseases, cancer or neurodegenerative diseases.
XX
PS      Example 26; Page 52; 100pp; English.
XX
CC      The invention relates to an isolated nucleic acid molecule that encodes a
CC      tumour necrosis factor-alpha (TNF-alpha) specific antibody. The nucleic
CC      acid molecule is useful in diagnosing and/or treating TNF-alpha-mediated
CC      pathologies and conditions, such as bacterial, viral or parasitic
CC      infections, chronic inflammatory diseases (e.g. rheumatoid arthritis,
CC      Crohn's disease or ulcerative colitis), autoimmune diseases (e.g.
CC      systemic lupus erythematosus, diabetes mellitus or Grave's disease),
CC      malignancies, vascular diseases and/or neurodegenerative diseases (e.g.
CC      Alzheimer's disease) and in research purposes. The present sequence
CC      represents the human TNF-alpha receptor DNA construct oligonucleotide #2
XX
SQ      Sequence 18 BP; 6 A; 3 C; 6 G; 3 T; 0 U; 0 Other;

Query Match      0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      835 TTGTGCTACCCAGATT 852
|||||
Db      18 TTGTGCTACCCAGATT 1
|||||
RESULT 108
ABX14797/c
ID      ABX14797 standard; DNA; 18 BP.
XX
AC      ABX14797;
XX
DT      03-APR-2003 (first entry)
XX
DE      p55 extracellular domain PCR primer #2.
XX
KW      Human; tumour necrosis factor; TNF; antibacterial; immunosuppressive;
KW      tumour necrosis factor inhibitor; bacterial infection; sepsis;
KW      endothelial damage; vascular damage; severe hypotension;
KW      disseminated intravascular coagulation; shock; inflammation; bacteraemia;
KW      PCR; primer; ss; p55.
XX
OS      Synthetic.
XX
PN      US2002141996-A1.
XX
PD      03-OCT-2002.
XX
PF      10-JAN-2002; 2002US-00043450.
XX
PR      18-MAR-1991; 91US-00670827.
PR      18-MAR-1992; 92US-00853606.
PR      11-SEP-1992; 92US-00943852.
PR      29-JAN-1993; 93US-00010406.
PR      02-FEB-1993; 93US-00013413.
PR      04-FEB-1994; 94US-000192093.
PR      04-FEB-1994; 94US-00192102.
PR      04-FEB-1994; 94US-00192861.
PR      18-OCT-1994; 94US-00324799.
PR      11-DEC-1995; 95US-00570674.
PR      12-AUG-1998; 98US-00133119.
PR      08-JAN-2001; 2001US-00756398.
PR      10-AUG-2001; 2001US-00927703.
XX
PA      (UANY-) UNIV NEW YORK MEDICAL CENT.
PA      (CENZ ) CENTOCOR INC.
XX
PI      Le J, Vilcek J, Daddona P, Ghrayeb J, Knight D, Siegel S;
XX
WPI; 2003-174129/17.
XX
PT      Treating bacterial infection in a human comprises administering to the
PT      human a tumor necrosis factor (TNF)-inhibiting amount of an anti-TNF
PT      chimeric antibody, which competitively inhibits binding of TNF to
PT      monoclonal antibody cA2.
XX
PS      Example 26; Page 52; 97pp; English.
XX
CC      The invention describes a method of treating bacterial infection in a
CC      human comprising administering to the human a tumour necrosis factor
CC      (TNF)-inhibiting amount of an anti-TNF chimeric antibody, which
CC      competitively inhibits binding of TNF to monoclonal antibody cA2. The
CC      methods are useful for treating bacterial infections, a pathology
CC      associated with a sepsis (e.g. endothelial damage, vascular damage,
CC      disseminated intravascular coagulation or severe hypotension), shock
CC      resulting from bacterial infection, or inflammatory reaction resulting
CC      from bacteraemia. The anti-TNF antibodies and peptides in the form of
CC      pharmaceutical and/or diagnostic compounds are useful for diagnosing and
CC      treating TNF-related pathologies. This sequence represents a primer used
CC      to isolate p55 extracellular domain for use in the creation of a p55
CC      heavy chain variable region fusion construct
XX
SQ      Sequence 18 BP; 6 A; 3 C; 6 G; 3 T; 0 U; 0 Other;

Query Match      0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;

```



Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 835 TTGTGCTACCCAGATT 852  
 Db 18 TTGTGCTACCCAGATT 1

RESULT 109  
 ABX11358/c  
 ID ABX11358 standard; DNA; 18 BP.  
 XX  
 AC ABX11358;  
 XX  
 DT 29-APR-2003 (first entry)  
 XX  
 DE PCR primer, #8, used to amplify the p55 extracellular domain.  
 XX  
 KW PCR; ss; TNFalpha; humanised antibody; tumour necrosis factor-alpha;  
 KW primer; antigen; constant region; heavy chain; light chain;  
 KW antigen binding region; complementarity determining region; CDR; A2; CA2;  
 KW framework region; cytokine; TNF; pro-inflammatory; tissue injury;  
 KW procoagulant; vascular endothelial cell; neutrophil; lymphocyte;  
 KW platelet activating factor; macrophage; immune disorder; scleroderma;  
 KW autoimmune disorder; rheumatoid arthritis; thyroiditis; diabetes;  
 KW graft versus host disease; Grave's disease; infection; AIDS;  
 KW inflammatory disease; sarcoidosis; chronic inflammatory bowel disease;  
 KW ulcerative colitis; Crohn's disease; atherosclerosis; dementia;  
 KW neurodegenerative disease; multiple sclerosis; Parkinson's disease;  
 KW Alzheimer's disease; cancer; hepatitis; ocular neovascularisation;  
 KW psoriasis; duodenal ulcer; angiodenesis; female reproductive tract;  
 KW immunosuppressive; dermatological; anti-HIV; antiarteriosclerotic;  
 KW neuroprotective; nootropic; cytostatic; gynecological; p55.  
 XX  
 OS Unidentified.  
 OS Synthetic.  
 XX  
 FN US2002132307-A1.  
 XX  
 PD 19-SEP-2002.  
 XX  
 PF 08-JAN-2001; 2001US-00756161.  
 XX  
 PR 12-AUG-1998; 98US-00133119.  
 XX  
 PA (UUNY ) UNIV NEW YORK STATE.  
 XX  
 PI Le J, Vilcek J, Daddona P, Ghayeb J, Knight D, Siegel S;  
 XX  
 DR WPI; 2003-237899/23.  
 XX  
 PT New humanized anti-TNF antibody with an antigen binding region, useful  
 PT for diagnosing and treating TNF-related pathologies, such as autoimmune  
 PT disorders, bacterial and viral infections, inflammatory diseases, AIDS  
 PT and cancer.  
 XX  
 PS Example 26; Page 51; 98pp; English.  
 XX  
 CC The invention discloses a new humanised antibody, or its antigen-binding  
 CC fragment, that selectively binds human tumour necrosis factor-alpha  
 CC (TNFalpha), comprising an antigen binding region of non-human origin and  
 CC at least a portion of an antibody of human origin. The antibody consists  
 CC of a constant region heavy or light chain of human origin and an antigen  
 CC binding region, comprising complementarity determining regions (CDRs)  
 CC derived from an antibody of murine origin that binds to human TNF-alpha  
 CC (A2 or CA2), and a framework region derived from a heavy or light chain  
 CC of human origin. Also disclosed is an expression vector comprising a  
 CC fused gene encoding the humanised antibody, or its antigen-binding  
 CC fragment, and the method for preparing it. The cytokine TNF causes pro-  
 CC inflammatory actions which result in tissue injury, such as inducing  
 CC procoagulant activity on vascular endothelial cells, increasing the  
 CC adherence of neutrophils and lymphocytes and stimulating the release of  
 CC platelet activating factor from macrophages, neutrophils and vascular  
 CC endothelial cells. The methods are useful for preparing a humanised

CC antibody, and antigen-binding fragment, and manufacturing a polypeptide.  
 CC The methods and compositions are also useful for the diagnosis and  
 CC treatment of TNF-related pathologies, such as acute and chronic immune  
 CC and autoimmune disorders (rheumatoid arthritis, thyroiditis, graft versus  
 CC host disease, scleroderma, diabetes and Grave's disease), bacterial and  
 CC viral infections including AIDS, inflammatory diseases (sarcoidosis,  
 CC chronic inflammatory bowel disease, ulcerative colitis, Crohn's disease,  
 CC and atherosclerosis), neurodegenerative diseases (multiple sclerosis,  
 CC Parkinson's disease, dementia and Alzheimer's disease), cancer,  
 CC hepatitis, ocular neovascularisation, psoriasis, duodenal ulcers and  
 CC angiogenesis of the female reproductive tract. The sequence presented is  
 CC a PCR primer which was used to amplify the p55 extracellular domain  
 XX  
 SQ Sequence 18 BP; 6 A; 3 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;  
 Best Local Similarity 100.0%; Pred. NO. 20;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 835 TTGTGCTACCCAGATT 852  
 Db 18 TTGTGCTACCCAGATT 1

RESULT 110  
 ABX11374/c  
 ID ABX11374 standard; DNA; 18 BP.  
 XX  
 AC ABX11374;  
 XX  
 DT 29-APR-2003 (first entry)  
 XX  
 DE PCR primer, #7, used to amplify the p55 extracellular domain.  
 XX  
 KW PCR; ss; tumour necrosis factor alpha; TNFalpha; rheumatoid arthritis;  
 KW TNF inhibitor; ankylosis; anti-TNF antibody; CA2; immunoglobulin G1;  
 KW primer; Ig G1; TNF; heavy chain; light chain; antigen binding; CDR;  
 KW complementarity determining region; framework region; cytokine;  
 KW pro-inflammatory; tissue injury; procoagulant; vascular endothelial cell;  
 KW neutrophil; lymphocyte; platelet activating factor; macrophage;  
 KW immune disorder; autoimmune disorder; rheumatoid arthritis; thyroiditis;  
 KW graft versus host disease; scleroderma; diabetes; Grave's disease;  
 KW infection; AIDS; inflammatory disease; ulcerative colitis; Crohn's disease;  
 KW chronic inflammatory bowel disease; neurodegenerative disease; multiple sclerosis;  
 KW atherosclerosis; neurodegenerative disease; multiple sclerosis;  
 KW Parkinson's disease; dementia Alzheimer's disease; cancer; hepatitis;  
 KW ocular neovascularisation; psoriasis; duodenal ulcer; angiodenesis;  
 KW female reproductive tract; haemodynamic; febrile; allergic episode; p55.  
 XX  
 OS Unidentified.  
 OS Synthetic.  
 XX  
 FN US2002146419-A1.  
 XX  
 PD 10-OCT-2002.  
 XX  
 PR 10-JAN-2002; 2002US-00044534.  
 XX  
 PR 18-MAR-1991; 91US-00670827.  
 PR 18-MAR-1992; 92US-00853606.  
 PR 11-SEP-1992; 92US-00943852.  
 PR 29-JAN-1993; 93US-00010406.  
 PR 02-FEB-1993; 93US-00013413.  
 PR 04-FEB-1994; 94US-00132093.  
 PR 04-FEB-1994; 94US-00132102.  
 PR 04-FEB-1994; 94US-00132861.  
 PR 11-DEC-1995; 95US-00570674.  
 PR 12-AUG-1998; 98US-00133119.  
 PR 08-JAN-2001; 2001US-00756398.  
 PR 10-AUG-2001; 2001US-00927703.  
 XX  
 PA (UUNY-) UNIV NEW YORK MEDICAL CENT.

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XX Le J, Vilcek J, Daddona P, Ghrayeb J, Knight D, Siegel S;
XX WPI; 2003-255124/25.
XX
XX Treating ankylosis in a human, comprises administering a tumor necrosis
XX factor (TNF)-inhibiting amount of anti-TNF chimeric antibody.
XX
XX Example 26; Page 52; 97pp; English.
XX
XX The invention discloses a method for treating ankylosis, by administering
XX a tumour necrosis factor (TNF)-inhibiting anti-TNF chimeric antibody
XX which competitively inhibits binding of TNF to the murine monoclonal
XX antibody CA2, where the antibody comprises an immunoglobulin (Ig) G1
XX constant region and binds to an epitope of human TNF. The antibody
XX consists of a constant region heavy or light chain of human origin and an
XX antigen binding region, comprising complementarity determining regions
XX (CDRs) derived from an antibody of murine origin that binds to human
XX TNFalpha (A2 or CA2), and a framework region derived from a heavy or
XX light chain of human origin. The cytokine TNF causes pro-inflammatory
XX actions which result in tissue injury, such as inducing procoagulant
XX activity on vascular endothelial cells, increasing the adherence of
XX neutrophils and lymphocytes and stimulating the release of platelet
XX activating factor from macrophages, neutrophils and vascular endothelial
XX cells. The methods and compositions are also useful for the diagnosis and
XX treatment of ankylosis and TNF-related pathologies, such as acute and
XX chronic immune and autoimmune disorders (rheumatoid arthritis,
XX thyroidosis, graft versus host disease, scleroderma, diabetes and Grave's
XX disease), bacterial and viral infections including AIDS, inflammatory
XX diseases (sarcoidosis, chronic inflammatory bowel disease, ulcerative
XX colitis, Crohn's disease and atherosclerosis), neurodegenerative diseases
XX (multiple sclerosis, Parkinson's disease, dementia and Alzheimer's
XX disease), cancer, hepatitis, ocular neovascularisation, psoriasis,
XX duodenal ulcers and angiogenesis of the female reproductive tract. The
XX chimeric anti-TNF Mab was well-tolerated and involved no haemodynamic,
XX febrile or allergic episodes. The sequence presented is a PCR primer
XX which was used to amplify the p55 extracellular domain
XX
XX Sequence 18 BP; 6 A; 3 C; 6 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 18; DB 1; Length 18;
XX Best Local Similarity 100.0%; Pred. No. 20;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 835 TTGTGCTTACCCAGATT 852
XX |||||
XX 18 TTGTGCTTACCCAGATT 1
XX
XX RESULT 111
XX ACD28380/C
XX ID ACD28380 standard; DNA; 18 BP.
XX
XX AC ACD28380;
XX
XX DT 06-NOV-2003 (first entry)
XX
XX DE Human p55 extracellular domain associated primer #2.
XX
XX KW Human; tumour necrosis factor alpha; TNF alpha; immunomodulator;
XX TNF-Antagonist; cachexia; cancer; HIV; AIDS; PCR; primer; ss; p55.
XX
XX OS Homo sapiens.
XX
XX PN US2003054004-A1.
XX
XX PD 20-MAR-2003.
XX
XX PF 10-JAN-2002; 2002US-00043432.
XX
XX PR 18-MAR-1991; 91US-00670827.
XX 18-MAR-1992; 92US-00833606.
XX 11-SEP-1992; 92US-00943852.
XX

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PR 29-JAN-1993; 93US-00010406.
PR 02-FEB-1993; 93US-00013413.
PR 04-FEB-1994; 94US-00192093.
PR 04-FEB-1994; 94US-00192102.
PR 04-FEB-1994; 94US-00192861.
PR 18-OCT-1994; 94US-00324799.
PR 11-DEC-1995; 95US-00570674.
PR 12-AUG-1998; 98US-00133119.
PR 08-JAN-2001; 2001US-00756398.
PR 10-AUG-2001; 2001US-00927703.
XX
XX (UUNY-) UNIV NEW YORK MEDICAL CENT.
XX
XX Le J, Vilcek J, Daddona P, Ghrayeb J, Knight D, Siegel S;
XX WPI; 2003-555374/52.
XX
XX Treating cachexia, particularly a cachexia associated with cancer, HIV or
XX AIDS comprising administering a tumor necrosis factor (TNF)-inhibiting
XX amount of human-murine anti-TNF chimeric antibodies.
XX
XX Example 26; Page 51; 97pp; English.
XX
XX The invention describes a method of treating cachexia in a human
XX comprising administering a tumour necrosis factor (TNF)-inhibiting amount
XX of: (a) an anti-TNF chimeric antibody, which competitively inhibits
XX binding of TNF to monoclonal antibody (mAb) CA2; (b) chimeric anti-TNF
XX antibody CA2; (c) at least one mAb CA2, or its TNF-binding fragment; or
XX (d) an anti-TNF chimeric antibody with epitopic specificity identical to
XX mAb CA2. Administering a TNF-inhibiting amount of an anti-TNF chimeric
XX antibody which has epitopic specificity identical to mAb CA2 is useful
XX for treating cachexia in humans, particularly a cachexia associated with
XX cancer, HIV or AIDS. This sequence represents a primer used to isolate
XX DNA encoding the human p55 extracellular domain for use in the creation
XX of a vector for expression of p55-antibody fusion proteins
XX
XX Sequence 18 BP; 6 A; 3 C; 6 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 18; DB 1; Length 18;
XX Best Local Similarity 100.0%; Pred. No. 20;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 835 TTGTGCTTACCCAGATT 852
XX |||||
XX 18 TTGTGCTTACCCAGATT 1
XX
XX RESULT 112
XX ADC46582/C
XX ID ADC46582 standard; DNA; 18 BP.
XX
XX AC ADC46582;
XX
XX DT 18-DEC-2003 (first entry)
XX
XX DE Heavy chain fusion PCR primer #2.
XX
XX KW Tumour necrosis factor-alpha; TNF-alpha; A2; CA2;
XX complementarity determining region; bacterial infection; viral infection;
XX fungal infection; parasitic infection; inflammatory disease; sarcoidosis;
XX atherosclerosis; autoimmune disease; rheumatoid arthritis;
XX systemic lupus erythematosus; neurodegenerative disease;
XX Huntington's Chorea; Parkinson's disease; malignancy; lymphoma;
XX carcinoma; alcohol-induced hepatitis; heavy chain fusion; PCR; primer;
XX ss.
XX
XX OS Synthetic.
XX
XX PN US2003144484-A1.
XX
XX PD 31-JUL-2003.
XX
XX 18-JUL-2002; 2002US-00198845.
XX

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XX 18-MAR-1991; 91US-00670827.
PR 18-MAR-1992; 92US-00853606.
PR 11-SEP-1992; 92US-00943852.
PR 29-JAN-1993; 93US-00010406.
PR 02-FEB-1993; 93US-00013413.
PR 04-FEB-1994; 94US-00192093.
PR 04-FEB-1994; 94US-00192102.
PR 18-OCT-1994; 94US-00192861.
PR 18-OCT-1994; 94US-00324799.
PR 11-DEC-1995; 95US-00570674.
PR 12-AUG-1998; 98US-00133119.
PR 08-JAN-2001; 2001US-00756398.
XX (UYNV ) UNIV NEW YORK STATE.
XX
XX Le J, Vilcek J, Daddona P, Ghrayeb J, Knight D, Siegel S;
XX WPI; 2003-744929/70.
XX
XX New human anti-tumor necrosis factor (TNF) antibody or its antigen
XX binding fragment that competitively inhibits binding of A2 or cA2 to
XX human TNF-alpha, useful for diagnosing and treating TNF-alpha-mediated
XX diseases, e.g. infection.
XX
XX Example 26; SEQ ID NO 15; 97pp; English.
XX
XX The invention relates to a human anti-tumour necrosis factor (TNF)
XX antibody or its antigen binding fragment that competitively inhibits
XX binding of antibodies A2 or cA2 to human TNF-alpha. The invention also
XX relates to a composition comprising the antibody or its antigen binding
XX fragment and a carrier, a human light or heavy chain that specifically
XX binds human TNF-alpha and competitively inhibits binding of A2 or cA2 to
XX human TNF-alpha, the human light or heavy chain consisting of the
XX complementarity determining regions of the light or heavy chain of A2 or
XX cA2, and a human light or heavy chain framework region and an isolated
XX nucleic acid that encodes the above human heavy or light chain. The
XX antibody is useful in vivo diagnosis and therapy of TNF-alpha-mediated
XX pathologies and conditions, such as infections (e.g. bacterial, viral,
XX fungal or parasitic), inflammatory diseases (e.g. sarcoidosis,
XX atherosclerosis), autoimmune diseases (e.g. rheumatoid arthritis,
XX systemic lupus erythematosus), neurodegenerative diseases (e.g.
XX Huntington's Chorea, Parkinson's disease), malignancies (e.g. lymphomas,
XX carcinomas) and alcohol-induced hepatitis. This sequence represents a PCR
XX primer used in the scope of the invention.
XX
XX Sequence 18 BP; 6 A; 3 C; 6 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 835 TTGTGCTTACCCAGATT 852
DB 18 TTGTGCTTACCCAGATT 1
RESULT 113
IDC61368/c
AD C61368 standard; DNA; 18 BP.
XX
XX ADC61368;
XX
XX 18-DEC-2003 (first entry)
XX
XX PCR primer #2 used to amplify human p55 cDNA.
XX
XX Tumour necrosis factor alpha; TNFalpha; heart pathology;
XX anti-TNF chimeric antibody; rheumatoid arthritis; cardiant; human; p55;
XX PCR; primer; ss.
XX
XX Homo sapiens.
XX

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PN US2003180299-A1.
XX
XX 25-SEP-2003.
XX
XX 28-JUN-2002; 2002US-00186559.
XX
XX 18-MAR-1991; 91US-00670827.
PR 18-MAR-1992; 92US-00853606.
PR 11-SEP-1992; 92US-00943852.
PR 29-JAN-1993; 93US-00010406.
PR 02-FEB-1993; 93US-00013413.
PR 04-FEB-1994; 94US-00192093.
PR 04-FEB-1994; 94US-00192102.
PR 18-OCT-1994; 94US-00192861.
PR 18-OCT-1994; 94US-00324799.
PR 11-DEC-1995; 95US-00570674.
PR 12-AUG-1998; 98US-00133119.
PR 08-JAN-2001; 2001US-00756398.
XX
XX (UYNV ) UNIV NEW YORK STATE.
XX
XX Le J, Vilcek J, Daddona P, Ghrayeb J, Knight D, Siegel S;
XX WPI; 2003-830975/77.
XX
XX Treating a Tumor Necrosis Factor mediated heart pathology in a human
XX comprises administering an anti-TNF chimeric antibody.
XX
XX Example 16; Page 52; 99pp; English.
XX
XX The present invention relates to a method of treating a tumour necrosis
XX Factor (TNF)-mediated heart pathology in a human subject. The method
XX comprises administering an anti-TNF chimeric antibody which is specific
XX for human TNFalpha. The method is useful for treating heart pathologies
XX and rheumatoid arthritis. The present sequence represents a PCR primer
XX used in the examples of the present invention.
XX
XX Sequence 18 BP; 6 A; 3 C; 6 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 835 TTGTGCTTACCCAGATT 852
DB 18 TTGTGCTTACCCAGATT 1
RESULT 114
ADD44668/c
ID ADD44668 standard; DNA; 18 BP.
XX
XX ADD44668;
XX
XX 15-JAN-2004 (first entry)
XX
XX p55 extracellular domain PCR primer #2.
XX
XX human; tumour necrosis factor alpha; ss; PCR; primer;
XX vascular inflammation; anti-TNF; tumour necrosis factor;
XX Kawasaki's pathology; disseminated intravascular coagulation;
XX atherosclerosis; cA2.
XX
XX Homo sapiens.
XX
XX US2003181695-A1.
XX
XX 25-SEP-2003.
XX
XX 21-FEB-2003; 2003US-00371961.
XX
XX 18-MAR-1991; 91US-00670827.
PR 18-MAR-1992; 92US-00853606.

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PR 11-SEP-1992; 92US-00943852.
PR 29-JAN-1993; 93US-00010406.
PR 02-FEB-1993; 93US-00013413.
PR 04-FEB-1994; 94US-00192093.
PR 04-FEB-1994; 94US-00192102.
PR 04-FEB-1994; 94US-00192861.
PR 18-OCT-1994; 94US-00324799.
PR 11-DEC-1995; 95US-00570674.
PR 12-AUG-1998; 98US-00133119.
PR 08-JAN-2001; 2001US-00756338.
XX (UNYU ) UNIV NEW YORK STATE.
XX
XX Le J, Vilcek J, Daddona P, Ghraheb J, Knight D, Siegel S;
XX WPI; 2003-831022/77.
XX
XX Treating a vascular inflammatory pathology, e.g. Kawasaki's pathology,
XX comprises administering an anti-Tumor Necrosis Factor (TNF) chimeric
XX antibody which competitively inhibits binding of TNF to a monoclonal
XX antibody.
XX
XX Example 26; SEQ ID NO 15; 100pp; English.
XX
XX The invention relates to a method of treating a vascular inflammatory
XX pathology in a human, comprising administering a single or divided 0.5-15
XX mg/kg dose at least once every 1-6 weeks of an anti-tumour necrosis
XX factor (TNF) chimeric antibody which competitively inhibits binding of
XX TNF to monoclonal antibody cA2. The invention is used to treat a vascular
XX inflammatory pathology particularly Kawasaki's pathology or disseminated
XX intravascular coagulation or atherosclerosis. The present sequence
XX represents a p55 extracellular domain PCR primer.
XX
XX Sequence 18 BP; 6 A; 3 C; 6 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 18; DB 1; Length 18;
XX Best Local Similarity 100.0%; Pred. No. 20;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 835 TTGTGCTACCCGAGTT 852
XX 18 TTGTGCTACCCGAGTT 1
XX
XX Db
XX
XX RESULT 115
XX AAZ48498/c
XX ID AAZ48498 standard; DNA; 18 BP.
XX
XX AC AAZ48498;
XX
XX 31-MAR-2000 (first entry)
XX
XX Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18891.
XX
XX Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;
XX inflammation; tumour formation; TNFR1; anticancer; ss.
XX
XX Synthetic.
XX OS Homo sapiens.
XX
XX US6007995-A.
XX
XX 28-DEC-1999.
XX
XX 26-JUN-1998; 98US-00106038.
XX
XX 26-JUN-1998; 98US-00106038.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Baker BF, Cowser LM;
XX
XX WPI; 2000-105333/09.
XX
XX
XX Antisense inhibition of tumor necrosis factor type 1 expression for
XX diagnosis, treatment and prevention of disease, particularly tumors.
XX
XX Example 10; Col 24; 34pp; English.
XX
XX The invention provides antisense compounds targeted to human tumour
XX necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds
XX can be used in a method of inhibiting the expression of TNFR1 human cells
XX or tissues. The antisense compounds specifically hybridize with one or
XX more nucleic acids encoding TNFR1 modulating the function of nucleic acid
XX molecules encoding TNFR1, ultimately modulating the amount of TNFR1
XX produced. The antisense compounds and method are useful as research
XX reagents and diagnostics, and in the treatment and prophylaxis of
XX infection, inflammation or tumour formation. Sequences AAZ48482-565
XX represent antisense oligos used for inhibition of the human TNFR1 mRNA
XX
XX Sequence 18 BP; 5 A; 7 C; 6 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 18; DB 1; Length 18;
XX Best Local Similarity 100.0%; Pred. No. 20;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 280 CTGCTGCTGCTGCTGCTG 297
XX 18 CTGCTGCTGCTGCTGCTG 1
XX
XX Db
XX
XX RESULT 116
XX ABT04994/c
XX ID ABT04994 standard; DNA; 18 BP.
XX
XX AC ABT04994;
XX
XX 11-OCT-2002 (first entry)
XX
XX TNFR1 expression modulation related antisense oligo SEQ ID No 24.
XX
XX Antisense compound; tumour necrosis factor receptor 1; liver disease;
XX TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
XX human; ds.
XX
XX Homo sapiens.
XX
XX WO200248168-A1.
XX
XX 20-JUN-2002.
XX
XX 22-OCT-2001; 2001WO-US051224.
XX
XX 24-OCT-2000; 2000US-00695451.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Baker BF, Cowser LM, Zhang H, Dean NM;
XX
XX WPI; 2002-583481/62.
XX
XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
XX necrosis factor receptor 1 (TNFR1), useful for treating humans having
XX disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX
XX Example 10; Page 44; 121pp; English.
XX
XX The invention relates to an antisense compound 8 to 30 nucleotides in
XX length targeted to nucleic acid molecule encoding tumour necrosis factor
XX receptor 1 (TNFR1), where the antisense compound inhibits expression of
XX TNFR1. The antisense compound is useful for inhibiting the expression of
XX TNFR1 in cells or tissues. The antisense compound is also useful for
XX treating an animal (preferably human) having a disease or condition
XX associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
XX injury) or a hyperproliferative disorder such as cancer, by inhibiting
XX the expression of TNFR1. The antisense compound is useful for

```

CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.  
CC This polynucleotide sequence represents a human oligonucleotide relating  
CC to the TNFR1 of the invention

XX SQ Sequence 18 BP; 5 A; 7 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 18;  
Best Local Similarity 100.0%; Pred. No. 20;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 280 CTGCTGCTGCGCTGGTG 297  
|||  
DB 18 CTGCTGCTGCGCTGGTG 1

RESULT 117

AAT30782

ID AAT30782 standard; DNA; 24 BP.

XX AC AAT30782;

XX XX 23-MAR-1998 (first entry)

XX TNF-R1 cytoplasmic domain encoding DNA amplifying forward primer.

XX CD40 associated protein; CAP; agonist; antagonist; autoimmune disease;  
XX treatment; cancer; TNF-R1 cytoplasmic domain; PCR primer; ss.

XX Synthetic.

XX WO9616665-A1.

XX 06-JUN-1996.

XX 04-DEC-1995; 95WO-US015695.

XX 02-DEC-1994; 94US-00349357.

XX (LJOL-) LA JOLLA CANCER RES FOUND.

XX Reed JC, Sato T;

XX WPI; 1996-286818/29.

XX New CD40 associated protein, agonists and antagonists - used to modulate  
XX cell proliferation, immune response, apoptosis etc., e.g. for treating  
XX cancer or autoimmune disease.

XX Example 2; Page 63; 94pp; English.

XX This primer is used for the PCR amplification of the cytoplasmic domain  
XX of TNF-R1 from a plasmid pUC19-p55-TNF-R1 to produce a GST-TNF-R1 fusion  
XX protein. This is used in the production of GST fusion proteins for  
XX detecting and characterising a CAP in vitro. CD40 is a cell surface  
XX receptor involved in apoptosis. This system identifies CAP-1, a CD40  
XX associated protein that specifically binds to CD40. Agonists and  
XX antagonists of CAP can increase or decrease the level of CAP expression  
XX in a cell and can thereby modulate the function of the cell. Such  
XX compounds can be used to treat cancer, autoimmune diseases like asthma,  
XX hay fever, rheumatoid arthritis and immunodeficiency diseases and  
XX neurodegeneration. Antibodies that bind specifically to CAP can be used  
XX to assay CAP, to detect pathologically altered levels. The CAP-1 encoding  
XX nucleic acid can be used to identify related genes and to express CAP for  
XX gene therapy

XX Sequence 24 BP; 6 A; 6 C; 9 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 18; DB 1; Length 24;  
Best Local Similarity 100.0%; Pred. No. 53;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 958 CGCTACCAACGGTGGAG 975  
|||

DB 7 CGCTACCAACGGTGGAG 24

RESULT 118

AAQ03929

ID AAQ03929 standard; DNA; 23 BP.

XX AC AAQ03929;

XX DT 25-MAR-2003 (revised)

XX DT 24-AUG-1990 (first entry)

XX HPV11 typing probe (WD151) for use with L1 consensus primers.

XX Papilloma-virus; consensus primer; PCR; probe; ss.

XX Synthetic.

XX WO9002821-A.

XX 22-MAR-1990.

XX 09-SEP-1988; 88US-00243486.

XX 09-SEP-1988; 88US-00243486.

XX 10-MAR-1989; 89US-00322550.

XX (CETU) CETUS CORP.

XX Mamos MM, Wright DK, Ting Y;

XX WPI; 1990-116005/15.

XX Detecting and typing human papilloma-virus - using consensus primers in  
XX polymerase chain reaction to amplify particular genomic regions.

XX Disclosure; Table 5; 33pp; English.

XX Genome position 7058. See also AAQ03998-Q03949. (Updated on 25-MAR-2003  
XX to correct PR field.)

XX Sequence 23 BP; 13 A; 6 C; 3 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 17.8; DB 1; Length 23;

Best Local Similarity 90.5%; Pred. No. 52;

Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1002 GAAATCGACACCTGAAAAGA 1022  
|||

DB 2 GAAACCCACACCTGAAAAGA 22  
|||

RESULT 119

AAQ03928

ID AAQ03928 standard; DNA; 23 BP.

XX AC AAQ03928;

XX DT 25-MAR-2003 (revised)

XX DT 24-AUG-1990 (first entry)

XX HPV11 typing probe (WD150) for use with L1 consensus primers.

XX Papilloma-virus; consensus primer; PCR; probe; ss.

XX Synthetic.

XX WO9002821-A.

XX 22-MAR-1990.

XX 09-SEP-1988; 88US-00243486.

PR 09-SEP-1988; 88US-00243486.  
XX 10-MAR-1989; 89US-00322550.  
XX (CETU ) CETUS CORP.  
PI Manos MM, Wright DK, Ting Y;  
XX WPI; 1990-116005/15.  
DR  
XX  
XX Detecting and typing human papilloma-virus - using consensus primers in  
PT polymerase chain reaction to amplify particular genomic regions.  
XX Disclosure; Table 5; 33pp; English.  
XX Genome position 7059. See also AAQ03898-Q03949. (Updated on 25-MAR-2003  
CC to correct PR field.)  
XX Sequence 23 BP; 12 A; 7 C; 3 G; 1 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 17.8; DB 1; Length 23;  
Best Local Similarity 90.5%; Pred. No. 52;  
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1002 GAAATCGACACCTGAAAAAGA 1022  
DB 3 GAAACCCACACCTGAAAAAGA 23  
RESULT 120  
AAQ56399  
ID AAQ56399 standard; DNA; 23 BP.  
XX AC AAQ56399;  
XX  
DT 25-MAR-2003 (revised)  
DT 29-JUL-1994 (first entry)  
XX  
DE L1 consensus primer HPV11 typing probe WD150.  
XX Human papilloma virus; amplification; polymerase chain reaction; PCR;  
KW detection; assay; ss.  
XX Synthetic.  
XX US5283171-A.  
XX  
PD 01-FEB-1994.  
XX  
XX 15-FEB-1991; 91US-00651356.  
XX PR 09-SEP-1988; 88US-00243486.  
PR 10-MAR-1989; 89US-00322550.  
PR 29-AUG-1989; 89WO-US003747.  
XX  
XX (UYRP ) UNIV ROCHESTER.  
PA (HOFF ) HOFFMANN LA ROCHE INC.  
XX  
XX Wolinsky SM, Broker TR, Ting Y, Manos MM, Wright DK;  
XX WPI; 1994-048082/06.  
XX  
XX Detection of genital human papilloma virus - by PCR amplification using  
PT defined consensus primer pairs.  
XX Disclosure; Page 8; 13pp; English.  
XX  
XX The sequence is that of HPV11 typing probe WD150 for use with L1  
CC consensus primers as part of a simple and rapid assay method for  
CC detecting and typing HPV in biological samples. (Updated on 25-MAR-2003  
CC to correct PR field.)  
XX  
XX Sequence 23 BP; 12 A; 7 C; 3 G; 1 T; 0 U; 0 Other;  
SQ

Query Match 0.8%; Score 17.8; DB 1; Length 23;  
Best Local Similarity 90.5%; Pred. No. 52;  
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1002 GAAATCGACACCTGAAAAAGA 1022  
DB 3 GAAACCCACACCTGAAAAAGA 23  
RESULT 121  
AAQ56400  
ID AAQ56400 standard; DNA; 23 BP.  
XX AC AAQ56400;  
XX  
DT 25-MAR-2003 (revised)  
DT 29-JUL-1994 (first entry)  
XX  
DE L1 consensus primer HPV11 typing probe WD151.  
XX Human papilloma virus; amplification; polymerase chain reaction; PCR;  
KW detection; assay; ss.  
XX Synthetic.  
XX US5283171-A.  
XX  
PD 01-FEB-1994.  
XX  
XX 15-FEB-1991; 91US-00651356.  
XX PR 09-SEP-1988; 88US-00243486.  
PR 10-MAR-1989; 89US-00322550.  
PR 29-AUG-1989; 89WO-US003747.  
XX  
XX (UYRP ) UNIV ROCHESTER.  
PA (HOFF ) HOFFMANN LA ROCHE INC.  
XX  
XX Wolinsky SM, Broker TR, Ting Y, Manos MM, Wright DK;  
XX WPI; 1994-048082/06.  
XX  
XX Detection of genital human papilloma virus - by PCR amplification using  
PT defined consensus primer pairs.  
XX Disclosure; Page 8; 13pp; English.  
XX  
XX The sequence is that of HPV11 typing probe WD151 for use with L1  
CC consensus primers as part of a simple and rapid assay method for  
CC detecting and typing HPV in biological samples. (Updated on 25-MAR-2003  
CC to correct PR field.)  
XX  
XX Sequence 23 BP; 13 A; 6 C; 3 G; 1 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 17.8; DB 1; Length 23;  
Best Local Similarity 90.5%; Pred. No. 52;  
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1002 GAAATCGACACCTGAAAAAGA 1022  
DB 2 GAAACCCACACCTGAAAAAGA 22  
RESULT 122  
AAT10824  
ID AAT10824 standard; DNA; 23 BP.  
XX AC AAT10824;  
XX  
DT 25-MAR-2003 (revised)  
DT 10-APR-1996 (first entry)  
XX  
XX Human papilloma virus 11 specific oligonucleotide probe WD150.  
SQ

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XX Human papilloma virus; probe; detection; diagnosis; genital; oral;
KW carcinomas; research; typing; HPV11; specific; WD150; ss.
XX Synthetic.
XX US5447839-A.
XX 05-SEP-1995.
XX 20-APR-1993; 93US-00050743.
XX 09-SEP-1988; 88US-00243486.
XX 10-MAR-1989; 89US-00322550.
XX 09-SEP-1989; 89WO-US003747.
XX 14-NOV-1990; 90US-00613142.
XX (HOFF ) HOFFMANN LA ROCHE INC.
XX
XX Ting Y, Resnick RM, Greer CE, Manos MM, Bauer HM;
XX WPI; 1995-319884/41.
XX
XX Detection of human papilloma virus DNA by amplification - using specific
XX consensus primer pairs and pref. detection with generic or type specific
XX probes for use in research and diagnosis.
XX Claim 3; Col 15-16; 36pp; English.
XX
XX The human papilloma virus (HPV) specific probes AAT10818-T10839 are used
XX to detect, or type HPV for research or diagnostic purposes, e.g. to
XX identify HPV that are implicated in genital or oral carcinomas. (Updated
XX on 25-MAR-2003 to correct PF field.)
XX
XX Sequence 23 BP; 13 A; 6 C; 3 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 17.8; DB 1; Length 23;
XX Best Local Similarity 90.5%; Pred. No. 52;
XX Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX Qy 1002 GAAATCGACACCTGAAAAAGA 1022
XX Db 2 GAAACCCACACCTGAAAAAGA 22
XX
XX RESULT 124
XX AAT10825
XX ID AAT10825 standard; DNA; 23 BP.
XX AC AAT10825;
XX
XX 25-MAR-2003 (revised)
XX 10-APR-1996 (first entry)
XX
XX Human papilloma virus 11 specific oligonucleotide probe WD151.
XX
XX Human papilloma virus; probe; detection; diagnosis; genital; oral;
KW carcinomas; research; typing; HPV11; specific; WD151; ss.
XX Synthetic.
XX US5447839-A.
XX 05-SEP-1995.
XX 20-APR-1993; 93US-00050743.
XX 09-SEP-1988; 88US-00243486.
XX 10-MAR-1989; 89US-00322550.
XX 09-SEP-1989; 89WO-US003747.
XX 14-NOV-1990; 90US-00613142.
XX (HOFF ) HOFFMANN LA ROCHE INC.
XX
XX Ting Y, Resnick RM, Greer CE, Manos MM, Bauer HM;
XX WPI; 1995-319884/41.
XX
XX Detection of human papilloma virus DNA by amplification - using specific
XX consensus primer pairs and pref. detection with generic or type specific
XX probes for use in research and diagnosis.
XX Claim 3; Col 15-16; 36pp; English.
XX
XX The human papilloma virus (HPV) specific probes AAT10818-T10839 are used
XX to detect, or type HPV for research or diagnostic purposes, e.g. to
XX identify HPV that are implicated in genital or oral carcinomas. (Updated
XX on 25-MAR-2003 to correct PF field.)
XX
XX Sequence 23 BP; 12 A; 7 C; 3 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 17.8; DB 1; Length 23;
XX Best Local Similarity 90.5%; Pred. No. 52;
XX Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX Qy 1002 GAAATCGACACCTGAAAAAGA 1022
XX Db 3 GAAACCCACACCTGAAAAAGA 23
XX
XX RESULT 123
XX AAT10825
XX ID AAT10825 standard; DNA; 23 BP.
XX AC AAT10825;
XX
XX 25-MAR-2003 (revised)
XX 10-APR-1996 (first entry)
XX
XX Human papilloma virus 11 specific oligonucleotide probe WD151.
XX
XX Human papilloma virus; probe; detection; diagnosis; genital; oral;
KW carcinomas; research; typing; HPV11; specific; WD151; ss.
XX Synthetic.
XX US5447839-A.
XX 05-SEP-1995.
XX 20-APR-1993; 93US-00050743.
XX 09-SEP-1988; 88US-00243486.
XX 10-MAR-1989; 89US-00322550.
XX 09-SEP-1989; 89WO-US003747.
XX 14-NOV-1990; 90US-00613142.
XX (HOFF ) HOFFMANN LA ROCHE INC.
XX
XX Ting Y, Resnick RM, Greer CE, Manos MM, Bauer HM;
XX WPI; 1995-319884/41.
XX
XX Detection of human papilloma virus DNA by amplification - using specific
XX consensus primer pairs and pref. detection with generic or type specific
XX probes for use in research and diagnosis.
XX Claim 3; Col 15-16; 36pp; English.
XX
XX The human papilloma virus (HPV) specific probes AAT10818-T10839 are used
XX to detect, or type HPV for research or diagnostic purposes, e.g. to
XX identify HPV that are implicated in genital or oral carcinomas. (Updated
XX on 25-MAR-2003 to correct PF field.)
XX
XX Sequence 23 BP; 13 A; 6 C; 3 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 17.8; DB 1; Length 23;
XX Best Local Similarity 90.5%; Pred. No. 52;
XX Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX Qy 1002 GAAATCGACACCTGAAAAAGA 1022
XX Db 2 GAAACCCACACCTGAAAAAGA 22
XX
XX RESULT 124
XX AAT10825
XX ID AAT10825 standard; DNA; 23 BP.
XX AC AAT10825;
XX
XX 25-MAR-2003 (revised)
XX 29-JAN-1997 (first entry)
XX
XX HPV typing probe WD151 for use with L1 consensus primers.
XX
XX Probe; primer; PCR; polymerase chain reaction; amplification;
XX human papillomavirus; consensus; ss.
XX Synthetic.
XX US5527898-A.
XX 18-JUN-1996.
XX 07-JUN-1995; 95US-00474542.
XX 09-SEP-1988; 88US-00243486.
XX 10-MAR-1989; 89US-00322550.
XX 09-SEP-1989; 89WO-US003747.
XX 14-NOV-1990; 90US-00613142.
XX 20-APR-1993; 93US-00050743.
XX 24-SEP-1993; 93US-00126452.
XX (HOFF ) HOFFMANN LA ROCHE INC.
XX
XX Bauer HM, Resnick RM, Greer CE, Manos MM, Zhang TY, Gravitt PE;
XX WPI; 1996-239903/30.
XX
XX Nucleic acid hybridisation probes - specific for selected human papilloma
XX virus types.
XX Disclosure; Col 31-32; 96pp; English.
XX
XX The invention relates to new oligonucleotide probes and primers used for
XX the detection of human papillomaviruses (HPV) which are not genital types
XX 6, 11, 16, 18 or 33. The probes and primers AAT44608-T44693 are esp. used
XX to detect HPV types 26, 31, 31B, 35, 39, 40, 43, 45, 51-59 and 68. The
XX primers can be used to detect these HPV types in conjunction with the
XX consensus primers and typing probes AAT44733-T44906, which are based on

```

CC and amplify fragments of the L1, E6, E7 and E1 regions of the HPV  
 CC sequences. Detection of the amplification products is done with probes  
 CC derived from consensus sequences found in all characterised HPV  
 CC sequences. Probes AAT44762-810 are examples of HPV typing probes for  
 CC identifying the amplified products generated by L1 consensus primers.  
 CC This sequence is a sense probe which has specificity for HPV11 and binds  
 CC to the HPV genome at position 7058. (Updated on 25-MAR-2003 to correct PR  
 CC field.)  
 XX  
 SQ Sequence 23 BP; 13 A; 6 C; 3 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 17.8; DB 1; Length 23;  
 Best Local Similarity 90.5%; Pred. No. 52;  
 Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1002 GAAATCGACACCTGAAAAAGA 1022  
 |||||  
 Db 2 GAAACCCACACCTGAAAAAGA 22

RESULT 125  
 AAT44770  
 ID AAT44770 standard; DNA; 23 BP.

AC AAT44770;

DT 25-MAR-2003 (revised)  
 DT 29-JAN-1997 (first entry)

DE HPV typing probe WD150 for use with L1 consensus primers.

KW Probe; primer; PCR; polymerase chain reaction; amplification;  
 KW human papillomavirus; consensus; ss.

XX Synthetic.

XX US5527898-A.

XX 18-JUN-1996.

XX 07-JUN-1995; 95US-00474542.

XX 09-SEP-1988; 88US-00243486.

XX 10-MAR-1989; 89US-00322550.

XX 09-SEP-1989; 89WO-US003747.

XX 14-NOV-1990; 90US-00613142.

XX 20-APR-1993; 93US-00050743.

XX 24-SEP-1993; 93US-00126452.

XX (HOFF ) HOFFMANN LA ROCHE INC.

XX Bauer HM, Resnick RM, Greer CE, Manos MM, Zhang TY, Gravitt PB;

XX WPI; 1996-299903/30.

XX Nucleic acid hybridisation probes - specific for selected human papilloma  
 XX virus types.

XX Disclosure; Col 31-32; 96pp; English.

XX The invention relates to new oligonucleotide probes and primers used for  
 CC the detection of human papillomaviruses (HPV) which are not genital types  
 CC 6, 11, 16, 18 or 33. The probes and primers AAT44608-T44693 are esp. used  
 CC to detect HPV types 26, 31, 31B, 35, 39, 40, 43, 45, 51-59 and 68. The  
 CC primers can be used to detect these HPV types in conjunction with the  
 CC consensus primers and typing probes AAT44733-T44906, which are based on  
 CC and amplify fragments of the L1, E6, E7 and E1 regions of the HPV  
 CC sequences. Detection of the amplification products is done with probes  
 CC derived from consensus sequences found in all characterised HPV  
 CC sequences. Probes AAT44762-810 are examples of HPV typing probes for  
 CC identifying the amplified products generated by L1 consensus primers.  
 CC This sequence is a sense probe which has specificity for HPV11 and binds  
 CC to the HPV genome at position 7059. (Updated on 25-MAR-2003 to correct PR

CC field.)

XX Sequence 23 BP; 12 A; 7 C; 3 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 17.8; DB 1; Length 23;  
 Best Local Similarity 90.5%; Pred. No. 52;  
 Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1002 GAAATCGACACCTGAAAAAGA 1022  
 |||||  
 Db 3 GAAACCCACACCTGAAAAAGA 23

RESULT 126  
 AAT78015  
 ID AAT78015 standard; DNA; 23 BP.

AC AAT78015;

DT 25-MAR-2003 (revised)  
 DT 07-OCT-1997 (first entry)

DE Human papillomavirus 11 specific typing probe WD151.

KW Human; papillomavirus 11; HPV11; typing probe; detection; ss.

XX Synthetic.

XX US5639871-A.

XX 17-JUN-1997.

XX 01-JUN-1995; 95US-00457648.

XX 09-SEP-1988; 88US-00243486.

XX 10-MAR-1989; 89US-00322550.

XX 29-AUG-1989; 89WO-US003747.

XX 14-NOV-1990; 90US-00613142.

XX 20-APR-1993; 93US-00050743.

XX 24-SEP-1993; 93US-00126452.

XX (HOFF ) ROCHE MOLECULAR SYSTEMS INC.

XX Imprim CC, Manos MM, Bauer HM, Zhang TY, Greer CE, Resnick RM;

XX Gravitt PB;

XX WPI; 1997-332084/30.

XX New oligonucleotide probes for human papilloma-virus - used for  
 XX detecting and typing HPV and for detecting previously unknown HPV types  
 XX and subtypes.

XX Disclosure; Col 119-120; 94pp; English.

XX The present sequence is a human papillomavirus 11 (HPV11) specific typing  
 XX probe. (Updated on 25-MAR-2003 to correct PR field.) (Updated on 25-MAR-  
 XX 2003 to correct PR field.)

XX Sequence 23 BP; 13 A; 6 C; 3 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 17.8; DB 1; Length 23;  
 Best Local Similarity 90.5%; Pred. No. 52;  
 Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1002 GAAATCGACACCTGAAAAAGA 1022  
 |||||  
 Db 2 GAAACCCACACCTGAAAAAGA 22

RESULT 127  
 AAT78014  
 ID AAT78014 standard; DNA; 23 BP.  
 XX





XX Claim 1; Col 15-16; 37pp; English.

XX This sequence represents a human papillomavirus (HPV) L1 type-specific

XX probe of the invention. This sequence may be used in conjunction with L1

XX specific primers for detecting and typing HPV. Identification and typing

XX of HPV is important as different types of HPV pose different risks for

XX infected individuals. HPV16 and HPV18 have been more consistently

XX identified in higher grades of cervical dysplasia and carcinoma than

XX other HPV types. (Updated on 25-MAR-2003 to correct PR field.)

XX SQ Sequence 23 BP; 12 A; 7 C; 3 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 17.8; DB 1; Length 23;

Best Local Similarity 90.5%; Pred. No. 52;

Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1002 GAAATGACACCTGAAAAAGA 1022

||||| |||||||

DB 3 GAAACCCACACCTGAAAAAGA 23

RESULT 130

AAV55819

ID AAV55819 standard; DNA; 24 BP.

XX AC AAV55819;

XX DT 27-AUG-2003 (revised)

XX DT 18-NOV-1998 (first entry)

XX DE Multimerisation of minimal motifs using primer ZGE2.

XX KW Fusion protein; stabilising polypeptide; proteolytic degradation;

XX resistance; half-life; autoimmune disease; inflammation; nitro drug;

XX IkappaB regulator protein; inflammatory bowel disease; in vivo imaging;

XX nitroreductase protein; enzyme therapy; prodrug therapy; protease;

XX cancer; pathological condition; minimal motif; PCR primer; ss.

XX OS Synthetic.

XX OS Human herpesvirus 4.

XX PN W09822577-A1.

XX PD 28-MAY-1998.

XX PF 17-NOV-1997; 97WO-IB001508.

XX PR 15-NOV-1996; 96US-0030986P.

XX PR 25-JUN-1997; 97US-0048945P.

XX PA (MASU//) MASUCCI M G.

XX PI Masucci MG;

XX DR WPI; 1998-312463/27.

XX PT New fusion proteins resistant to proteolytic degradation - comprising a

XX core protein with a stabilising polypeptide comprising a peptide sequence

XX containing glycine repeats.

XX PS Disclosure; Page 72; 120pp; English.

XX CC Sequences shown in AAV55812 to AAV55827 represent primers used in the

XX course of the invention for the multimerisation of minimal motifs. The

XX invention provides a method for increasing the resistance of a core

XX protein to proteolytic degradation that comprises linking or inserting

XX onto or into the core protein a stabilising polypeptide of formula

XX [(Gly)x(Glyb)y(Glyc)z]n where Glya, Glyb, Glyc are 1-6 sequential Gly

XX residues and X, Y, Z are Ala, Ser, Val, Ile, Leu, Met, Phe, Pro or Thr

XX and n can be anything between 1-66. X, Y and Z need not be identical from

XX n repeat to n repeat. Alternatively a nucleic acid encoding a stabilising

XX polypeptide can be linked onto or inserted into a nucleic acid encoding a

CC core protein. The fusion proteins of the invention are more resistant to

CC degradation by proteases and, thus, have a longer half-life than the

CC unfused core protein. The products can be used for treating autoimmune

CC diseases, cancer and inflammation. In particular, the core protein may be

CC an IkappaB regulator protein for the treatment of inflammatory bowel

CC disease, or a nitroreductase protein which can activate nitro drugs in

CC enzyme/prodrug therapy to treat cancer or other pathological conditions.

CC The fusion proteins can also be used in diagnostic methods such as in

CC vivo imaging. (Updated on 27-AUG-2003 to correct OS field.)

XX SQ Sequence 24 BP; 3 A; 14 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 17.8; DB 1; Length 24;

Best Local Similarity 90.5%; Pred. No. 60;

Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1126 TCCACCTTCACCTCCAGCTCC 1146

||||| |||||||

DB 2 TCCACCCGACCTCCAGCTCC 22

RESULT 131

ADB680557c

ID ADB68055 standard; DNA; 24 BP.

XX AC ADB68055;

XX DT 04-DEC-2003 (first entry)

XX DE G4 phosphorothioate oligonucleotide 2a used to modulate telomere length.

XX KW telomere length; aging; hyperproliferative condition; cancer; ss; GA.

XX OS Unidentified.

XX FT Key Location/Qualifiers

FT modified\_base 13

FT /\*tag= a

FT /\*mod\_base= i

FT /\*note= "inosine"

XX US2003096776-A1.

XX PD 22-MAY-2003.

XX PF 02-JAN-2002; 2002US-00038335.

XX PR 29-SEP-1992; 92US-00954185.

XX PR 29-SEP-1993; 93WO-US009297.

XX PR 12-JUN-1995; 95US-00403888.

XX PR 23-APR-1999; 99US-00299058.

XX PA (ISIS-) ISIS PHARM INC.

XX PI Hanecak RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;

XX PI Ecker DJ, Vickers TA, Wyatt JR;

XX WPI; 2003-606442/57.

XX PT New chemically modified oligonucleotides, useful for modulating telomere

XX length of a mammalian chromosome, inhibiting the division of a malignant

XX mammalian cell, or modulating the effects of aging of a mammalian cell.

XX PS Example 2; Page 6; 10pp; English.

XX CC The invention relates to a novel chemically modified oligonucleotide

XX having no more than about 27 nucleic acid base units. The oligonucleotide

XX modulates mammalian telomere length. The chemically modified

XX oligonucleotide of the invention may be useful for modulating the

XX telomere length of a mammalian chromosome, inhibiting the division of a

XX malignant mammalian cell or modulating the effects of aging of a

XX mammalian cell. The oligonucleotides may also be useful for treating

XX diseases associated with abnormal telomere length such as aging and

CC hyperproliferative conditions including cancer. The current sequence is  
 CC that of the G4 phosphorothioate oligonucleotide 2 (alternative) of the  
 CC invention which was used to modulate telomere length.

SQ Sequence 24 BP; 0 A; 0 C; 16 G; 7 T; 0 U; 1 Other;  
 Query Match 0.8%; Score 17.8; DB 1; Length 24;  
 Best Local Similarity 86.4%; Pred. No. 60;  
 Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1245 CTCGACCCCATCCCAACCCC 1266

DB 24 CCCGACCCCATCCCAACCCC 3

RESULT 132

ABK16809

ID ABK16809 standard; DNA; 24 BP.

XX AC ABK16809;

XX DT 26-MAR-2002 (first entry)

XX DE Human protein refolding PCR primer #36.

XX KW Protein refolding; growth hormone supergene family; human; mouse; ss;  
 XX KW therapeutic half-life; PCR primer; anti-angiogenesis factor.

XX OS Homo sapiens.

XX FN WO200187925-A2.

XX PD 22-NOV-2001.

XX PF 16-MAY-2001; 2001WO-US016088.

XX PR 16-MAY-2000; 2000US-0204617P.

XX PA (BOLD-) BOLDER BIOTECHNOLOGY INC.

XX PI Rosendahl MS, Cox GN, Doherty DH;

XX DR WPI; 2002-089843/12.

XX PT Making and refolding insoluble or aggregated proteins having free  
 PT cysteine by exposing host cell expressing protein to cysteine blocking  
 PT agent, and exposing to cysteine reactive group to increase their  
 PT effectiveness.

XX PS Example 9; Page 39; 110pp; English.

XX CC The invention relates to a host cell, made to express an insoluble or  
 CC aggregated protein having free cysteines residues. The cell is then lysed  
 CC by chemical, enzymatic or physical agents and solubilised by exposing it  
 CC to a denaturing agent, a reducing agent and a cysteine blocking agent,  
 CC and is refolded into a biologically active form by reducing the  
 CC concentrations of denaturing and reducing agents. The protein may belong  
 CC to the growth hormone supergene family or may be an anti-angiogenesis  
 CC factor. The method is useful for preparing a refolded, soluble form of an  
 CC insoluble or aggregated protein. The proteins of the invention can act as  
 CC delivery vehicles for enhancement of the circulatory half-life of the  
 CC therapeutics that are attached or for directing delivery of a specific  
 CC target within the body. Sequences ABK16774-ABK16852 represent PCR primers  
 CC used in synthesis of the proteins

SQ Sequence 24 BP; 4 A; 8 C; 2 G; 10 T; 0 U; 0 Other;

Query Match 0.8%; Score 17.6; DB 1; Length 24;

Best Local Similarity 83.3%; Pred. No. 68;  
 Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 944 TTGCTTTAACTCATCGCTACCAAC 967

DB 944 TTGCTTTAACTCATCGCTACCAAC 3

DB 1 TTCGTTTTCTCTATCGCTACCAAC 24

RESULT 133

ABT05167/c

XX ID ABT05167 standard; DNA; 20 BP.

XX AC ABT05167;

XX DT 11-OCT-2002 (first entry)

XX DE TNFR1 expression modulation related antisense oligo SEQ ID No 197.

XX KW Antisense compound; tumour necrosis factor receptor 1; liver disease;  
 XX KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;  
 XX KW mouse; murine; ds.

XX OS Mus sp.

XX PN WO200248168-A1.

XX PD 20-JUN-2002.

XX PF 22-OCT-2001; 2001WO-US051224.

XX PR 24-OCT-2000; 2000US-00695451.

XX PA (ISIS-) ISIS PHARM INC.

XX PI Baker BF, Cowsett LM, Zhang H, Dean NM;

XX DR WPI; 2002-583481/62.

XX PT Novel antisense compound targeted to nucleic acid molecule encoding tumor  
 PT necrosis factor receptor 1 (TNFR1), useful for treating humans having  
 PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.

XX PS Example 21; Page 61; 121pp; English.

XX CC The invention relates to an antisense compound 8 to 30 nucleotides in  
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor  
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of  
 CC TNFR1. The antisense compound is useful for inhibiting the expression of  
 CC TNFR1 in cells or tissues. The antisense compound is also useful for  
 CC treating an animal (preferably human) having a disease or condition  
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver  
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting  
 CC the expression of TNFR1. The antisense compound is useful for  
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.  
 CC This polynucleotide sequence represents a mouse oligonucleotide relating  
 CC to the TNFR1 of the invention

SQ Sequence 20 BP; 7 A; 5 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 17.4; DB 1; Length 20;

Best Local Similarity 94.7%; Pred. No. 42;  
 Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 756 CTGCCATGCAGGTTCTTT 774

DB 19 CTGCCATGCAGGTTCTTT 1

RESULT 134

AAQ61998/c

ID AAQ61998 standard; DNA; 22 BP.

XX AC AAQ61998;

XX DT 25-MAR-2003 (revised)

XX DT 04-NOV-1994 (first entry)

XX DE Guanine quartet containing oligomer, #9.

```

XX Inhibition; replication; herpes simplex virus; HSV; HIV; retard;
KW human cytomegalovirus; influenza virus; inflammation; telomere length;
KW neurological disorders; phospholipase A2 activity; hyperproliferation;
KW malignancy; cardiovascular disease; snake bite; malignancy; aging; ss.
XX OS
XX Synthetic.
XX
XX Key Location/Qualifiers
FT misc_feature 1..22
FT /*tag= a
FT /note= "Phosphorothionate intersugar linkages"
XX
XX WO9408053-A1.
XX
XX PD 14-APR-1994.
XX
XX PF 29-SEP-1993; 93WO-US009297.
XX
XX PR 29-SEP-1992; 92US-00954185.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX PI Hanecak RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;
PI Ecker DJ, Vickers TA, Wyatt JR, Imbach JL;
XX
XX WPI; 1994-135613/16.
XX
XX New modified oligo-nucleotide contg guanine quartet - inhibits activity
XX of viruses, e.g. HIV, and phospholipase A2 and modulates telomere length
XX of chromosomes.
XX
XX PS Disclosure; Page 107; 144pp; English.
XX
XX The sequences given in AAQ61990-2001 are oligonucleotides which contain
XX G4 or G3 stretches and which may be used for inhibiting replication of
XX herpes simplex virus (HSV), activity of HIV, human cytomegalovirus or
XX influenza virus, or for treating inflammatory and neurological disorders
XX caused by phospholipase A2 activity in cases of hyper- proliferation,
XX malignancy, cardiovascular disease and snake bite. Oligonucleotides such
XX as these, may be used for inhibiting division of malignant cells by
XX modulating telomere length, which may also retard aging. (Updated on 25-
XX MAR-2003 to correct PN field.)
XX
XX SQ Sequence 22 BP; 0 A; 0 C; 16 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 17.2; DB 1; Length 22;
XX Best Local Similarity 86.4%; Pred. No. 65;
XX Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 1245 CTCGACCCCAATCCCAACCCC 1266
XX ||| ||||| ||||| |||||
XX Db 22 CCCCAACCCCAACCCCAACCCC 1
XX
XX RESULT 135
XX AAQ61991/c
XX ID AAQ61991 standard; DNA; 22 BP.
XX
XX AC AAQ61991;
XX
XX DT 25-MAR-2003 (revised)
XX DT 04-NOV-1994 (first entry)
XX
XX Guanine quartet containing oligomer, #2.
XX
XX Inhibition; replication; herpes simplex virus; HSV; HIV; retard;
KW human cytomegalovirus; influenza virus; inflammation; telomere length;
KW neurological disorders; phospholipase A2 activity; hyperproliferation;
KW malignancy; cardiovascular disease; snake bite; malignancy; aging; ss.
XX
XX OS Synthetic.
XX

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FH Key Location/Qualifiers
FT misc_feature 1..22
FT /*tag= a
FT /note= "Phosphorothionate intersugar linkages"
XX
XX PN WO9408053-A1.
XX
XX PD 14-APR-1994.
XX
XX PF 29-SEP-1993; 93WO-US009297.
XX
XX PR 29-SEP-1992; 92US-00954185.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX PI Hanecak RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;
PI Ecker DJ, Vickers TA, Wyatt JR, Imbach JL;
XX
XX WPI; 1994-135613/16.
XX
XX New modified oligo-nucleotide contg guanine quartet - inhibits activity
XX of viruses, e.g. HIV, and phospholipase A2 and modulates telomere length
XX of chromosomes.
XX
XX PS Disclosure; Page 105; 144pp; English.
XX
XX The sequences given in AAQ61990-2001 are oligonucleotides which contain
XX G4 or G3 stretches and which may be used for inhibiting replication of
XX herpes simplex virus (HSV), activity of HIV, human cytomegalovirus or
XX influenza virus, or for treating inflammatory and neurological disorders
XX caused by phospholipase A2 activity in cases of hyper- proliferation,
XX malignancy, cardiovascular disease and snake bite. Oligonucleotides such
XX as these, may be used for inhibiting division of malignant cells by
XX modulating telomere length, which may also retard aging. (Updated on 25-
XX MAR-2003 to correct PN field.)
XX
XX SQ Sequence 22 BP; 0 A; 0 C; 16 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 17.2; DB 1; Length 22;
XX Best Local Similarity 86.4%; Pred. No. 65;
XX Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 1245 CTCGACCCCAATCCCAACCCC 1266
XX ||| ||||| ||||| |||||
XX Db 22 CCCCAACCCCAACCCCAACCCC 1
XX
XX RESULT 136
XX AAQ61895/c
XX ID AAQ61895 standard; DNA; 22 BP.
XX
XX AC AAQ61895;
XX
XX DT 25-MAR-2003 (revised)
XX DT 04-NOV-1994 (first entry)
XX
XX HSV replication inhibiting oligomer, ISIS no 5677.
XX
XX Inhibition; replication; herpes simplex virus; HSV; HIV;
KW human cytomegalovirus; influenza virus; inflammation;
KW neurological disorders; phospholipase A2 activity; hyperproliferation;
KW malignancy; cardiovascular disease; snake bite; malignancy;
KW telomere length; retard; aging; ss.
XX
XX OS Synthetic.
XX
XX Key Location/Qualifiers
FT misc_feature 1..22
FT /*tag= a
FT /note= "Phosphorothionate intersugar linkages"
XX
XX PN WO9408053-A1.
XX

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PD 14-APR-1994.
XX
XX 29-SEP-1993; 93WO-US009297.
XX
XX 29-SEP-1992; 92US-00954185.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Hanecak RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;
XX Ecker DJ, Vickers TA, Wyatt JR, Imbach JL;
XX
XX WPI; 1994-135613/16.
XX
XX New modified oligo-nucleotide contg guanine quartet - inhibits activity
XX of viruses, e.g. HIV, and phospholipase A2 and modulates telomere length
XX of chromosomes.
XX
XX Disclosure; Page 19; 144pp; English.
XX
XX The sequences given in AAQ61825-50 and AAQ61886-906 are oligonucleotides
XX which contain a G4 or two G3 stretches and which may be used for
XX inhibiting replication of herpes simplex virus (HSV). Oligonucleotides
XX such as these may also be used for inhibiting activity of HIV, human
XX cytomegalovirus or influenza virus, or for treating inflammatory and
XX neurological disorders caused by phospholipase A2 activity in cases of
XX hyperproliferation, malignancy, cardiovascular disease and snake bite.
XX They may also be used for inhibiting division of malignant cells by
XX modulating telomere length, which may also retard aging. (Updated on 25-
XX MAR-2003 to correct PN field.)
XX
XX Sequence 22 BP; 0 A; 0 C; 16 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 17.2; DB 1; Length 22;
XX Best Local Similarity 86.4%; Pred. No. 65;
XX Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 1245 CTCGACCCCATCCCAACCCC 1266
XX Db 22 CCCCAACCCCAACCCCAACCCC 1
XX
XX RESULT 137
XX AAQ61903/c
XX ID AAQ61903 standard; DNA; 22 BP.
XX AC AAQ61903;
XX
XX 25-MAR-2003 (revised)
XX 04-NOV-1994 (first entry)
XX
XX HSV replication inhibiting oligomer, ISIS no 5670.
XX
XX Inhibition; replication; herpes simplex virus; HSV; HIV;
XX human cytomegalovirus; influenza virus; inflammation;
XX neurological disorders; phospholipase A2 activity; hyperproliferation;
XX malignancy; cardiovascular disease; snake bite; malignancy;
XX telomere length; retard; aging; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX misc_feature 1..22
XX /*tag= a
XX /note= "Phosphorothionate intersugar linkages"
XX
XX WO9408053-A1.
XX
XX 14-APR-1994.
XX
XX 29-SEP-1993; 93WO-US009297.
XX
XX 29-SEP-1992; 92US-00954185.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Hanecak RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;
XX Ecker DJ, Vickers TA, Wyatt JR, Imbach JL;
XX
XX WPI; 1994-135613/16.
XX
XX New modified oligo-nucleotide contg guanine quartet - inhibits activity
XX of viruses, e.g. HIV, and phospholipase A2 and modulates telomere length
XX of chromosomes.
XX
XX Claim 5; Page 19; 144pp; English.
XX
XX The sequences given in AAQ61825-50 and AAQ61886-906 are oligonucleotides
XX which contain a G4 or two G3 stretches and which may be used for
XX inhibiting replication of herpes simplex virus (HSV). Oligonucleotides
XX such as these may also be used for inhibiting activity of HIV, human
XX cytomegalovirus or influenza virus, or for treating inflammatory and
XX neurological disorders caused by phospholipase A2 activity in cases of
XX hyperproliferation, malignancy, cardiovascular disease and snake bite.
XX They may also be used for inhibiting division of malignant cells by
XX modulating telomere length, which may also retard aging. (Updated on 25-
XX MAR-2003 to correct PN field.)
XX
XX Sequence 22 BP; 0 A; 0 C; 16 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 17.2; DB 1; Length 22;
XX Best Local Similarity 86.4%; Pred. No. 65;
XX Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 1245 CTCGACCCCATCCCAACCCC 1266
XX Db 22 CCCCAACCCCAACCCCAACCCC 1
XX
XX RESULT 137
XX AAQ61903/c
XX ID AAQ61903 standard; DNA; 22 BP.
XX AC AAQ61903;
XX
XX 25-MAR-2003 (revised)
XX 04-NOV-1994 (first entry)
XX
XX HSV replication inhibiting oligomer, ISIS no 5670.
XX
XX Inhibition; replication; herpes simplex virus; HSV; HIV;
XX human cytomegalovirus; influenza virus; inflammation;
XX neurological disorders; phospholipase A2 activity; hyperproliferation;
XX malignancy; cardiovascular disease; snake bite; malignancy;
XX telomere length; retard; aging; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX misc_feature 1..22
XX /*tag= a
XX /note= "Phosphorothionate intersugar linkages"
XX
XX WO9408053-A1.
XX
XX 14-APR-1994.
XX
XX 29-SEP-1993; 93WO-US009297.
XX
XX 29-SEP-1992; 92US-00954185.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Ecker DJ;

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PA (ISIS-) ISIS PHARM INC.
XX
XX Hanecak RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;
XX Ecker DJ, Vickers TA, Wyatt JR, Imbach JL;
XX
XX WPI; 1994-135613/16.
XX
XX New modified oligo-nucleotide contg guanine quartet - inhibits activity
XX of viruses, e.g. HIV, and phospholipase A2 and modulates telomere length
XX of chromosomes.
XX
XX Disclosure; Page 19; 144pp; English.
XX
XX The sequences given in AAQ61825-50 and AAQ61886-906 are oligonucleotides
XX which contain a G4 or two G3 stretches and which may be used for
XX inhibiting replication of herpes simplex virus (HSV). Oligonucleotides
XX such as these may also be used for inhibiting activity of HIV, human
XX cytomegalovirus or influenza virus, or for treating inflammatory and
XX neurological disorders caused by phospholipase A2 activity in cases of
XX hyperproliferation, malignancy, cardiovascular disease and snake bite.
XX They may also be used for inhibiting division of malignant cells by
XX modulating telomere length, which may also retard aging. (Updated on 25-
XX MAR-2003 to correct PN field.)
XX
XX Sequence 22 BP; 0 A; 0 C; 16 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 17.2; DB 1; Length 22;
XX Best Local Similarity 86.4%; Pred. No. 65;
XX Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 1245 CTCGACCCCATCCCAACCCC 1266
XX Db 22 CCCCAACCCCAACCCCAACCCC 1
XX
XX RESULT 138
XX AAQ97987/c
XX ID AAQ97987 standard; DNA; 22 BP.
XX AC AAQ97987;
XX
XX 25-MAR-2003 (revised)
XX 19-OCT-1995 (first entry)
XX
XX Peptide nucleic acid oligomer targetting HIV gene.
XX
XX Peptide nucleic acid; PNA; HIV; human immunodeficiency virus; AIDS;
XX antiviral; antisense; triple helix; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX misc_feature 1..22
XX /*tag= a
XX /note= "at least one (and preferably all) of the backbone
XX subunits are composed of N-acetyl N-(2-aminoethyl)glycine
XX peptide residues, the nucleobase being attached
XX covalently to the acetyl group and the peptide linkage
XX being formed by condensation of the glycine carboxy group
XX of one residue with the amino group of the 2-aminoethyl
XX moiety in the next residue"
XX
XX WO9504068-A1.
XX
XX 09-FEB-1995.
XX
XX 28-JUL-1994; 94WO-US008517.
XX
XX 29-JUL-1993; 93US-00099718.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Ecker DJ;

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XX WPI; 1995-082179/11.  
 XX  
 PT Oligomer hybridisable to HIV sequence and contg. peptide nucleic acid  
 PT sub-unit - binds in complementary manner to DNA and RNA, and useful for  
 PT modulating HIV viral activity, e.g. in treating AIDS.  
 XX  
 PS Claim 2; Page 176; 186pp; English.  
 XX  
 CC New peptide nucleic acid (PNA) oligomers are provided which (a) consist  
 CC of naturally occurring nucleobases covalently bound to a polyamide  
 CC backbone and (b) hybridise to the translation initiation AUG region, 5'  
 CC untranslated region (5' UTR), 3' untranslated region (3' UTR), splice  
 CC junctions or coding sequence of a human immunodeficiency virus gene  
 CC chosen from env, gag, pol, rev and tat. The PNAs can be used to target  
 CC RNA and single stranded DNA (ssDNA) to produce antisense-type gene  
 CC regulation moieties. They have utility as gene-targeted drugs for  
 CC modulating HIV processes. Hence they can be used to treat AIDS and other  
 CC viral infections. They are also useful in diagnostic applications and as  
 CC research tools. PNA oligomers have high affinity for complementary single  
 CC stranded DNA. They are also able to form triple helices in which a first  
 CC PNA strand binds with RNA or ssDNA and a second PNA strand binds with the  
 CC resulting double helix or with the first PNA strand. The PNAs possess no  
 CC significant charge and are water soluble, which facilitates cellular  
 CC uptake. Further, since they contain amides of non-biological amino acids,  
 CC they are biostable and resistant to enzymatic degradation by proteases.  
 CC The present sequence is a specifically claimed PNA sequence (represented  
 CC by the sequence of nucleobases) targetting HIV genes. (Updated on 25-MAR-  
 CC 2003 to correct PN field.)  
 XX  
 SQ Sequence 22 BP; 0 A; 0 C; 16 G; 6 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 17.2; DB 1; Length 22;  
 Best Local Similarity 86.4%; Pred. No. 65;  
 Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1245 CTCGACCCCATCCCAACCCC 1266  
 Db 22 CCCCAACCCCAACCCCAACCCC 1  
 RESULT 139  
 ID AAQ73376/c  
 AC AAQ73376;  
 XX  
 DT 25-MAR-2003 (revised)  
 DT 02-MAY-1995 (first entry)  
 XX  
 DE Anti-HSV-1 G4 oligo #5651.  
 XX  
 KW Hybridise; herpes simplex virus; HSV; open reading frame;  
 KW translation initiation site; coding region; 5' UTR; ss.  
 XX  
 OS Synthetic.  
 XX  
 XX WO9419945-A1.  
 XX  
 XX 15-SEP-1994.  
 XX  
 XX 07-MAR-1994; 94WO-US002471.  
 XX  
 XX 12-MAR-1993; 93US-00031147.  
 XX  
 XX (ISIS-) ISIS PHARM INC.  
 XX  
 XX Draper KG, Crooke ST, Mirabelli CK, Ecker DJ, Hanecak R;  
 PI Anderson KP, Brown-Driver VL, Wyatt JR;  
 XX  
 XX WPI; 1994-302552/37.  
 XX  
 XX New oligonucleotide(s) hybridising with DNA or RNA of herpesvirus gene -

PT are used in the treatment and diagnosis of herpes simplex virus,  
 PT cytomegalovirus, Epstein Barr virus and varicella zoster infections.  
 XX  
 PS Claim 12; Page 35; 72pp; English.  
 XX  
 CC The sequences given in AAQ73325-81 represent oligonucleotides which  
 CC hybridise specifically with DNA or RNA from a herpes virus gene  
 CC corresponding to one of the open reading frames UL5, -8, -9, -20, -27-  
 CC 29, -30, -42, -52 or IE175 of herpes simplex virus type 1 (HSV-1). These  
 CC oligos pref. hybridise with a translation initiation site, a coding  
 CC region or a 5' untranslated region. These oligos may be used in  
 CC compositions for the treatment and diagnosis of herpes viral infection,  
 CC by contacting the virus or the animal, or its cells, tissues or body  
 CC fluids with the oligo. (Updated on 25-MAR-2003 to correct PN field.)  
 XX  
 SQ Sequence 24 BP; 0 A; 0 C; 16 G; 8 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 17.2; DB 1; Length 24;  
 Best Local Similarity 86.4%; Pred. No. 87;  
 Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1245 CTCGACCCCATCCCAACCCC 1266  
 Db 24 CCCCAACCCCAACCCCAACCCC 3  
 RESULT 140  
 ID AAQ61902/c  
 AC AAQ61902;  
 XX  
 DT 25-MAR-2003 (revised)  
 DT 04-NOV-1994 (first entry)  
 XX  
 DE HSV replication inhibiting oligomer, ISIS no 5649.  
 XX  
 KW Inhibition; replication; herpes simplex virus; HSV; HIV;  
 KW human cytomegalovirus; influenza virus; inflammation;  
 KW neurological disorders; phospholipase A2 activity; hyperproliferation;  
 KW malignancy; cardiovascular disease; snake bite; malignancy;  
 KW telomere length; retard; aging; ss.  
 XX  
 OS Synthetic.  
 XX  
 XX Key Location/Qualifiers  
 FT misc\_feature 1.24  
 FT /\*tag= a  
 FT /note= "Phosphorothionate intersugar linkages"  
 XX  
 XX WO9408053-A1.  
 XX  
 XX 14-APR-1994.  
 XX  
 XX 29-SEP-1993; 93WO-US009297.  
 XX  
 XX 29-SEP-1992; 92US-00954185.  
 XX  
 XX (ISIS-) ISIS PHARM INC.  
 XX  
 XX Hanecak RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;  
 PI Ecker DJ, Vickers TA, Wyatt JR, Imbach JL;  
 XX  
 XX WPI; 1994-135613/16.  
 XX  
 XX New modified oligo-nucleotide contg guanine quartet - inhibits activity  
 PT of viruses, e.g. HIV, and phospholipase A2 and modulates telomere length  
 PT of chromosomes.  
 XX  
 PS Disclosure; Page 19; 144pp; English.  
 XX  
 CC The sequences given in AAQ61825-50 and AAQ61886-906 are oligonucleotides  
 CC which contain a G4 or two G3 stretches and which may be used for

CC inhibiting replication of herpes simplex virus (HSV). Oligonucleotides  
 CC such as these may also be used for inhibiting activity of HIV, human  
 CC cytomegalovirus or influenza virus, or for treating inflammatory and  
 CC neurological disorders caused by phospholipase A2 activity in cases of  
 CC hyperproliferation, malignancy, cardiovascular disease and snake bite.  
 CC They may also be used for inhibiting division of malignant cells by  
 CC modulating telomere length, which may also retard aging. (Updated on 25-  
 CC MAR-2003 to correct PN field.)

XX SQ Sequence 24 BP; 0 A; 0 C; 16 G; 8 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 17.2; DB 1; Length 24;  
 Best Local Similarity 86.4%; Pred. No. 87;  
 Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1245 CTCGACCCCATCCCAACCCC 1266  
 Db 24 CCCCAACCCCAACCCCAACCCC 3

RESULT 141  
 ID AAQ61990/c standard; DNA; 24 BP.  
 XX AC AAQ61990;  
 XX 25-MAR-2003 (revised)  
 DT 04-NOV-1994 (first entry)  
 XX Guanine quartet containing oligomer, #1.  
 XX Inhibition; replication; herpes simplex virus; HSV, HIV; retard;  
 KW human cytomegalovirus; influenza virus; inflammation; telomere length;  
 KW neurological disorders; phospholipase A2 activity; hyperproliferation;  
 KW malignancy; cardiovascular disease; snake bite; malignancy; aging; ss.  
 XX OS Synthetic.  
 XX Key Location/Qualifiers  
 FT misc\_feature 1..24  
 FT /\*tag= a  
 FT /note= "Phosphorothionate intersugar linkages"  
 XX WO9408053-A1.  
 XX 14-APR-1994.  
 XX 29-SEP-1993; 93WO-US009297.  
 XX 29-SEP-1992; 92US-00954185.  
 XX (ISIS-) ISIS PHARM INC.  
 XX Hanecak RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;  
 PI Ecker DJ, Vickers TA, Wyatt JR, Imbach JL;  
 XX WPI; 1994-135613/16.  
 XX New modified oligo-nucleotide contg guanine quartet - inhibits activity  
 PT of viruses, e.g. HIV, and phospholipase A2 and modulates telomere length  
 PT of chromosomes.  
 XX Claim 5; Page 105; 144pp; English.  
 XX The sequences given in AAQ61990-2001 are oligonucleotides which contain  
 CC G4 or G3 stretches and which may be used for inhibiting replication of  
 CC herpes simplex virus (HSV), activity of HIV, human cytomegalovirus or  
 CC influenza virus, or for treating inflammatory and neurological disorders  
 CC caused by phospholipase A2 activity in cases of hyper- proliferation,  
 CC malignancy, cardiovascular disease and snake bite. Oligonucleotides such  
 CC as these, may be used for inhibiting division of malignant cells by  
 CC modulating telomere length, which may also retard aging. (Updated on 25-  
 CC MAR-2003 to correct PN field.)

XX SQ Sequence 24 BP; 0 A; 0 C; 16 G; 8 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 17.2; DB 1; Length 24;  
 Best Local Similarity 86.4%; Pred. No. 87;  
 Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1245 CTCGACCCCATCCCAACCCC 1266  
 Db 24 CCCCAACCCCAACCCCAACCCC 3

RESULT 142  
 ID AAQ61894/c standard; DNA; 24 BP.  
 XX AC AAQ61894;  
 XX 25-MAR-2003 (revised)  
 DT 04-NOV-1994 (first entry)  
 XX HSV replication inhibiting oligomer, ISIS no 5651.  
 XX Inhibition; replication; herpes simplex virus; HSV; HIV;  
 KW human cytomegalovirus; influenza virus; inflammation;  
 KW neurological disorders; phospholipase A2 activity; hyperproliferation;  
 KW malignancy; cardiovascular disease; snake bite; malignancy;  
 KW telomere length; retard; aging; ss.  
 XX OS Synthetic.  
 XX Key Location/Qualifiers  
 FT misc\_feature 1..24  
 FT /\*tag= a  
 FT /note= "Phosphorothionate intersugar linkages"  
 XX WO9408053-A1.  
 XX 14-APR-1994.  
 XX 29-SEP-1993; 93WO-US009297.  
 XX 29-SEP-1992; 92US-00954185.  
 XX (ISIS-) ISIS PHARM INC.  
 XX Hanecak RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;  
 PI Ecker DJ, Vickers TA, Wyatt JR, Imbach JL;  
 XX WPI; 1994-135613/16.  
 XX New modified oligo-nucleotide contg guanine quartet - inhibits activity  
 PT of viruses, e.g. HIV, and phospholipase A2 and modulates telomere length  
 PT of chromosomes.  
 XX Claim 5; Page 19; 144pp; English.  
 XX The sequences given in AAQ61825-50 and AAQ61886-906 are oligonucleotides  
 CC which contain a G4 or two G3 stretches and which may be used for  
 CC inhibiting replication of herpes simplex virus (HSV). Oligonucleotides  
 CC such as these may also be used for inhibiting activity of HIV, human  
 CC cytomegalovirus or influenza virus, or for treating inflammatory and  
 CC neurological disorders caused by phospholipase A2 activity in cases of  
 CC hyperproliferation, malignancy, cardiovascular disease and snake bite.  
 CC They may also be used for inhibiting division of malignant cells by  
 CC modulating telomere length, which may also retard aging. (Updated on 25-  
 CC MAR-2003 to correct PN field.)

XX SQ Sequence 24 BP; 0 A; 0 C; 16 G; 8 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 17.2; DB 1; Length 24;  
 Best Local Similarity 86.4%; Pred. No. 87;  
 Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1245 CTCGACCCCATCCCAACCCC 1266  
 DB 24 CCCCAACCCCAACCCCAACCCC 3

RESULT 143  
 AAQ61997/c

ID AAQ61997 standard; DNA; 24 BP.  
 AC AAQ61997;  
 XX  
 DT 25-MAR-2003 (revised)  
 DT 19-OCT-1995 (first entry)  
 XX  
 DE Peptide nucleic acid oligomer targeting HIV gene.  
 XX  
 KW Peptide nucleic acid; PNA; HIV; human immunodeficiency virus; AIDS;  
 KW antiviral; antisense; triple helix; ss.  
 XX  
 OS Synthetic.  
 XX  
 FH Key Location/Qualifiers  
 FT misc\_feature 1..24  
 FT /tag= a  
 FT /note= "at least one (and preferably all) of the backbone  
 FT subunits are composed of N-acetyl N-(2-aminoethyl)glycine  
 FT peptide residues, the nucleobase being attached  
 FT covalently to the acetyl group and the peptide linkage  
 FT being formed by condensation of the glycine carboxy group  
 FT of one residue with the amino group of the 2-aminoethyl  
 FT moiety in the next residue"  
 XX  
 XX WO9504068-A1.  
 PN  
 FT  
 XX 09-FEB-1995.  
 PD  
 XX  
 PF 28-JUL-1994; 94WO-US008517.  
 XX  
 PR 29-JUL-1993; 93US-00099718.  
 XX  
 XX (ISIS-) ISIS PHARM INC.  
 PA  
 XX Ecker DJ;  
 PI  
 XX WPI; 1995-082179/11.  
 DR  
 XX  
 XX Oligomer hybridisable to HIV sequence and contg. peptide nucleic acid  
 PT subunit - binds in complementary manner to DNA and RNA, and useful for  
 PT modulating HIV viral activity, e.g. in treating AIDS.  
 PT  
 PS Claim 2; Page 176; 186pp; English.  
 XX  
 CC New peptide nucleic acid (PNA) oligomers are provided which (a) consist  
 CC of naturally occurring nucleobases covalently bound to a polyamide  
 CC backbone and (b) hybridise to the translation initiation AUG region, 5'  
 CC untranslated region (5' UTR), 3' untranslated region (3' UTR), splice  
 CC junctions or coding sequence of a human immunodeficiency virus gene  
 CC chosen from env, gag, pol, rev and tat. The PNAs can be used to target  
 CC RNA and single stranded DNA (ssDNA) to produce antisense-type gene  
 CC regulation moieties. They have utility as gene-targeted drugs for  
 CC modulating HIV processes. Hence they can be used to treat AIDS and other  
 CC viral infections. They are also useful in diagnostic applications and as  
 CC research tools. PNA oligomers have high affinity for complementary single  
 CC stranded DNA. They are also able to form triple helices in which a first  
 CC PNA strand binds with RNA or ssDNA and a second PNA strand binds with the  
 CC resulting double helix or with the first PNA strand. The PNAs possess no  
 CC significant charge and are water soluble, which facilitates cellular  
 CC uptake. Further, since they contain amides of non-biological amino acids,  
 CC they are biostable and resistant to enzymatic degradation by proteases.  
 CC The present sequence is a specifically claimed PNA sequence (represented  
 CC by the sequence of nucleobases) targeting HIV genes. (Updated on 25-MAR-  
 CC 2003 to correct PN field.)  
 XX  
 SQ Sequence 24 BP; 0 A; 0 C; 16 G; 8 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 17.2; DB 1; Length 24;  
 Best Local Similarity 86.4%; Pred. No. 87;  
 Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1245 CTCGACCCCATCCCAACCCC 1266  
 DB 24 CCCCAACCCCAACCCCAACCCC 3

RESULT 144  
 AAQ97981/c

ID AAQ97981 standard; DNA; 24 BP.  
 AC AAQ97981;  
 XX  
 DT 25-MAR-2003 (revised)  
 DT 19-OCT-1995 (first entry)  
 XX  
 DE Peptide nucleic acid oligomer targeting HIV gene.  
 XX  
 KW Peptide nucleic acid; PNA; HIV; human immunodeficiency virus; AIDS;  
 KW antiviral; antisense; triple helix; ss.  
 XX  
 OS Synthetic.  
 XX  
 FH Key Location/Qualifiers  
 FT misc\_feature 1..24  
 FT /tag= a  
 FT /note= "Phosphorothionate intersugar linkages"  
 XX  
 XX WO9408053-A1.  
 PN  
 FT  
 XX 14-APR-1994.  
 PD  
 XX  
 PF 29-SEP-1993; 93WO-US009297.  
 XX  
 PR 29-SEP-1992; 92US-00954185.  
 XX  
 XX (ISIS-) ISIS PHARM INC.  
 PA  
 XX Hanecek RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;  
 PI Ecker DJ, Vickers TA, Wyatt JR, Imbach JL;  
 XX WPI; 1994-135613/16.  
 DR  
 XX  
 XX New modified oligo-nucleotide contg guanine quartet - inhibits activity  
 PT of viruses, e.g. HIV, and phospholipase A2 and modulates telomere length  
 PT of chromosomes.  
 PT  
 PS Disclosure; Page 107; 144pp; English.  
 XX  
 CC The sequences given in AAQ61990-2001 are oligonucleotides which contain  
 CC G4 or G3 stretches and which may be used for inhibiting replication of  
 CC herpes simplex virus (HSV), activity of HIV, human cytomegalovirus or  
 CC influenza virus, or for treating inflammatory and neurological disorders  
 CC caused by phospholipase A2 activity in cases of hyper-proliferation,  
 CC malignancy, cardiovascular disease and snake bite. Oligonucleotides such  
 CC as these, may be used for inhibiting division of malignant cells by  
 CC modulating telomere length, which may also retard aging. (Updated on 25-  
 CC MAR-2003 to correct PN field.)  
 XX  
 SQ Sequence 24 BP; 0 A; 0 C; 16 G; 8 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 17.2; DB 1; Length 24;  
 Best Local Similarity 86.4%; Pred. No. 87;  
 Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1245 CTCGACCCCATCCCAACCCC 1266  
 DB 24 CCCCAACCCCAACCCCAACCCC 3

RESULT 144  
 AAQ97981/c



```

Db      24  CCCAACCCCAACCCCAACCCC 3
RESULT 145
AAT39967/c
ID AAT39967 standard; DNA; 24 BP.
XX
AC AAT39967;
XX
XX 24-JUN-1997 (first entry)
XX
XX Minimal motif coding sequence ZGS1/ZGS2.
XX
XX Epstein-Barr virus; EBV; nuclear antigen; EBVNA1; antigenic protein;
XX Glycine-rich repeat sequence; immune system; regulatory protein; enzyme;
XX cytokine; lymphokine; cell adhesion molecule; costimulatory molecule;
XX drug resistance; tumour suppressant; genetic disease; viral disease;
XX enzyme disorder; Gaucher's disease; cancer; immune system disorder; GRRS;
XX gene therapy; minimal motif; ds.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX misc_feature 1..4 /*tag= a
XX /*note= "5' overhang"
XX misc_feature complement(24)
XX /*tag= b
XX /*note= "5' overhang of TTCC"
XX
XX WO9632483-A1.
XX
XX 17-OCT-1996.
XX
XX 10-APR-1996; 96WO-GB000876.
XX
XX 10-APR-1995; 95SE-00001324.
XX
XX 01-SEP-1995; 95US-00522995.
XX
XX 15-SEP-1995; 95US-00529190.
XX
XX (MASU/) MASUCCI M.
XX
XX Masucci M;
XX
XX WPI; 1996-477134/47.
XX
XX P-PSDB; AAW05706.
XX
XX New proteins containing GRRS which are invisible to the immune system -
XX used for treating cancer, immune system disorders, viral diseases, etc.
XX
XX Example 1; Page 43; 61pp; English.
XX
XX AAT39966-T39973 represent double stranded coding sequences for minimal
XX motifs of glycine-rich repeat sequences (GRRS). Full length GRRS
XX sequences, such as the Epstein-Barr virus strain B95.8 nuclear antigen
XX (EBNA1) represented by AAW05704, can be used in the method of the
XX invention. The method of the invention is for making an antigenic protein
XX invisible to the immune system, and consists of inserting a GRRS into the
XX antigenic protein. The method can be used to insert a GRRS into
XX therapeutic proteins, marker genes, regulatory proteins of viral vectors,
XX or vaccine components. The therapeutic proteins include enzymes,
XX cytokines, lymphokines, cell adhesion molecules, costimulatory molecules,
XX or protein products of drug resistant genes or tumour suppressor genes.
XX The antigenic proteins or corresponding nucleic acids are used to treat
XX genetic and viral diseases, especially enzyme disorders such as Gaucher's
XX disease, cancer, immune system disorders and other diseases treatable by
XX gene therapy
XX
XX Sequence 24 BP; 4 A; 2 C; 14 G; 4 T; 0 U; 0 Other;
XX
Query Match 0.8%; Score 17.2; DB 1; Length 24;
Best Local Similarity 86.4%; Pred. NO. 87;
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

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Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1129 ACCTTCACCTCCAGCTCCACCT 1150
DB 24 ACCCGCACCTCCAGCTCCACCT 3
RESULT 146
AAV55813
ID AAV55813 standard; DNA; 24 BP.
XX
XX AAV55813;
XX
XX 27-AUG-2003 (revised)
XX
XX 18-NOV-1998 (first entry)
XX
XX Multimerisation of minimal motifs using primer ZGA2.
XX
XX Fusion protein; stabilising polypeptide; proteolytic degradation;
XX resistance; half-life; autoimmune disease; inflammation; nitro drug;
XX IkappaB regulator protein; inflammatory bowel disease; in vivo imaging;
XX nitroreductase protein; enzyme therapy; prodrug therapy; protease;
XX cancer; pathological condition; minimal motif; PCR primer; ss.
XX
XX Synthetic.
XX
XX Human herpesvirus 4.
XX
XX WO9822577-A1.
XX
XX 28-MAY-1998.
XX
XX 17-NOV-1997; 97WO-IB001508.
XX
XX 15-NOV-1996; 96US-0030986P.
XX
XX 25-JUN-1997; 97US-0048945P.
XX
XX (MASU/) MASUCCI M G.
XX
XX Masucci MG;
XX
XX WPI; 1998-312463/27.
XX
XX New fusion proteins resistant to proteolytic degradation - comprising a
XX core protein with a stabilising polypeptide comprising a peptide sequence
XX containing glycine repeats.
XX
XX Disclosure; Page 72; 120pp; English.
XX
XX Sequences shown in AAV55812 to AAV55827 represent primers used in the
XX course of the invention for the multimerisation of minimal motifs. The
XX invention provides a method for increasing the resistance of a core
XX protein to proteolytic degradation that comprises linking or inserting
XX onto or into the core protein a stabilising polypeptide of formula
XX [(Gly)X(Gly)Y(Gly)Z]n where Gly, Glyb, Glyc are 1-6 sequential Gly
XX residues and X, Y, Z are Ala, Ser, Val, Ile, Leu, Met, Phe, Pro or Thr
XX and n can be anything between 1-66. X, Y and Z need not be identical from
XX n repeat to n repeat. Alternatively a nucleic acid encoding a stabilising
XX polypeptide can be linked onto or inserted into a nucleic acid encoding a
XX core protein. The fusion proteins of the invention are more resistant to
XX degradation by proteases and, thus, have a longer half-life than the
XX unfused core protein. The products can be used for treating autoimmune
XX diseases, cancer and inflammation. In particular, the core protein may be
XX an IkappaB regulator protein for the treatment of inflammatory bowel
XX disease, or a nitroreductase protein which can activate nitro drugs in
XX enzyme/prodrug therapy to treat cancer or other pathological conditions.
XX The fusion proteins can also be used in diagnostic methods such as in
XX vivo imaging. (Updated on 27-AUG-2003 to correct OS field.)
XX
XX Sequence 24 BP; 5 A; 14 C; 3 G; 2 T; 0 U; 0 Other;
XX
Query Match 0.8%; Score 17.2; DB 1; Length 24;
Best Local Similarity 86.4%; Pred. NO. 87;
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

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QY 1126 TCCACCTTCACCTCCAGCTCCA 1147
DE ||||| ||||| ||||| |||||
XX 2 TCCACCGCAGCTTCAGCACCA 23
Db

RESULT 147
ID ADB68048/c
AC ADB68048;
XX
XX
XX 04-DEC-2003 (first entry)
DE
XX G4 phosphorothioate oligonucleotide 2 used to modulate telomere length.
XX telomere length; aging; hyperproliferative condition; cancer; ss; G4.
XX Unidentified.
OS
XX US2003096776-A1.
XX
XX 22-MAY-2003.
XX
XX 02-JAN-2002; 2002US-00038335.
XX
XX 29-SEP-1992; 92US-00954185.
XX
XX 29-SEP-1993; 93WO-US009297.
XX
XX 12-JUN-1995; 95US-00403888.
XX
XX 23-APR-1999; 99US-00299056.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Hanecek RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;
XX Ecker DJ, Vickers TA, Wyatt JR;
XX WPI; 2003-606442/57.
XX
XX New chemically modified oligonucleotides, useful for modulating telomere
XX length of a mammalian chromosome, inhibiting the division of a malignant
XX mammalian cell, or modulating the effects of aging of a mammalian cell.
XX
XX Example 2; Page 8; 10pp; English.
XX
XX The invention relates to a novel chemically modified oligonucleotide
XX having no more than about 27 nucleic acid base units. The oligonucleotide
XX modulates mammalian telomere length. The chemically modified
XX oligonucleotide of the invention may be useful for modulating the
XX telomere length of a mammalian chromosome, inhibiting the division of a
XX malignant mammalian cell or modulating the effects of aging of a
XX mammalian cell. The oligonucleotides may also be useful for treating
XX diseases associated with abnormal telomere length such as aging and
XX hyperproliferative conditions including cancer. The current sequence is
XX that of the G4 phosphorothioate oligonucleotide 2 of the invention which
XX was used to modulate telomere length.
XX
XX Sequence 24 BP; 0 A; 0 C; 16 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 17.2; DB 1; Length 24;
XX Best Local Similarity 86.4%; Pred. No. 87;
XX Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
QY 1245 CTCGACCCCATCCCAACCCC 1266
DE ||||| ||||| ||||| |||||
XX 24 CCCCAACCCCAACCCCAACCCC 3
Db

RESULT 148
ID ABT05122/c
XX
XX ABT05122 standard; DNA; 18 BP.
XX
XX ABT05122;
XX
XX
```

```
DT 11-OCT-2002 (first entry)
XX
XX TNFR1 expression modulation related antisense oligo SEQ ID No 152.
DE
XX Antisense compound; tumour necrosis factor receptor 1; liver disease;
XX TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
XX human; ds.
XX
XX Homo sapiens.
OS
XX WO200248168-A1.
XX
XX 20-JUN-2002.
XX
XX 22-OCT-2001; 2001WO-US051224.
XX
XX 24-OCT-2000; 2000US-00695451.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Baker BF, Cowser LM, Zhang H, Dean NM;
XX WPI; 2002-583481/62.
XX
XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
XX necrosis factor receptor 1 (TNFR1), useful for treating humans having
XX disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX
XX Example 18; Page 56; 121pp; English.
XX
XX The invention relates to an antisense compound 8 to 30 nucleotides in
XX length targeted to nucleic acid molecule encoding tumour necrosis factor
XX receptor 1 (TNFR1), where the antisense compound inhibits expression of
XX TNFR1. The antisense compound is useful for inhibiting the expression of
XX TNFR1 in cells or tissues. The antisense compound is also useful for
XX treating an animal (preferably human) having a disease or condition
XX associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
XX injury) or a hyperproliferative disorder such as cancer, by inhibiting
XX the expression of TNFR1. The antisense compound is useful for
XX diagnostics, therapeutics, prophylaxis and as research reagents and kits.
XX This polynucleotide sequence represents a human oligonucleotide relating
XX to the TNFR1 of the invention
XX
XX Sequence 18 BP; 4 A; 3 C; 8 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.8%; Score 17; DB 1; Length 18;
XX Best Local Similarity 100.0%; Pred. No. 38;
XX Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 1169 CCAACTTTCGGGCTCCC 1185
DE ||||| ||||| ||||| |||||
XX 17 CCAACTTTCGGGCTCCC 1
Db

RESULT 149
ABK68350
ID ABK68350 standard; DNA; 21 BP.
XX
XX ABK68350;
XX
XX 02-JUL-2002 (first entry)
XX
XX Mouse HYPLIP1 locus specific primer 412D2T #1.
XX
XX Mouse; primer; antilipemic; cardiant; hypotensive; anorectic; HYPLIP1;
XX FCHL1; lipid disorder; familial combined hyperlipidaemia;
XX coronary artery disease; atherogenic lipoprotein phenotype; cancer;
XX hyperapobetalipoproteinaemia; hypertriglyceridaemia; obesity; ss;
XX familial dyslipidaemic hypertension; syndrome X; insulin resistance;
XX hypercholesterolaemia; chromosome 3.
XX
XX Mus sp.
XX
```

PN WO200220847-A2.  
 XX 14-MAR-2002.  
 XX 07-SEP-2001; 2001WO-US028181.  
 XX 08-SEP-2000; 2000US-0231322P.  
 XX (REGC ) UNIV CALIFORNIA.  
 XX Bodnar JS, Castellani LM, Chatterjee A, De Jong P, Lusis AJ;  
 PI Ohmen J, Ross D, Tafuri S, Wu C;  
 XX WPI; 2002-339808/37.  
 XX Novel HYPLIP1 and FCHL1 genes and their sequence variations associated  
 PT with lipid disorder and cancer, useful for prognosis, diagnosis and  
 PT treatment of lipid disorders.  
 XX  
 PS Claim 11; Page 77; 102pp; English.  
 XX This invention relates to the cDNA and protein sequences of novel  
 CC proteins HYPLIP1 or FCHL1 and to sequence variations within these genes  
 CC that have been shown to be associated with lipid disorders.  
 CC Oligonucleotide probes that hybridise to the cDNA sequence are useful for  
 CC analysing the expression of FCHL1 by detecting the expression of the mRNA  
 CC transcript in the sample. A host cell transformed with the cDNA of the  
 CC invention is useful for producing the protein by recombinant means.  
 CC Pharmaceutical compositions based on the sequences of the invention are  
 CC useful for treating or preventing a lipid disorder associated with  
 CC expression of FCHL1 such as familial combined hyperlipidaemia, coronary  
 CC artery disease, atherogenic lipoprotein phenotype,  
 CC hyperapobetalipoproteinemia, hypertriglyceridaemia, familial  
 CC dyslipidaemic hypertension, syndrome X, obesity, insulin resistance and  
 CC hypercholesterolaemia. The cDNA sequence is useful in the diagnosis or  
 CC prognosis of predisposition to lipid disorders and cancers, and also to  
 CC identify a molecule which enhances or decreases the HYPLIP1 or FCHL1  
 CC activity. The present sequence represents an oligonucleotide primer  
 CC specific for the mouse HYPLIP1 locus of the invention. The mouse HYPLIP1  
 CC locus is situated on chromosome 3  
 XX  
 SQ Sequence 21 BP; 3 A; 6 C; 6 G; 4 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 16.8; DB 1; Length 21;  
 Best Local Similarity 90.0%; Pred. No. 72;  
 Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 866 GCACCTGAGGACTCAGGCACC 885  
 DB 1 GCTCTGAGGACTCAGGCTCC 20  
 RESULT 150  
 AAL49018  
 ID AAL49018 standard; DNA; 21 BP.  
 XX  
 AC AAL49018;  
 XX  
 DT 29-OCT-2002 (first entry)  
 XX  
 DE Murine Spot14 coding sequence probe #1.  
 XX  
 KW Protein-tyrosine phosphatase 1B; PTP1B; type 2 diabetes; inhibitor;  
 KW insulin resistance; mouse; phosphatidylinositol-3-kinase; PI3-K;  
 KW antidiabetic; probe; Spot14; ss.  
 XX  
 OS Mus sp.  
 XX  
 PN WO200264840-A2.  
 XX  
 PD 22-AUG-2002.  
 XX  
 PF 13-FEB-2002; 2002WO-US004194.

XX 13-FEB-2001; 2001US-0268399P.  
 PR 12-FEB-2002; 2002US-00074194.  
 XX  
 FA (ABBO ) ABBOTT LAB.  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Zinker BA, Trevillyan JM, Jirousek MR, Rondinone CM, Cowse LM;  
 PI Wyatt J, Monia BP, Butler MM, Waring JF;  
 XX  
 DR WPI; 2002-636634/68.  
 XX  
 PT Identifying inhibitors of protein tyrosine phosphatase 1B, useful for  
 PT identifying compounds for treating diabetes, by measuring the levels of  
 PT the p85-alpha, p50-alpha and p55-alpha isoforms of the  
 PT phosphatidylinositol-3-kinase.  
 XX  
 PS Example 9; Page 22; 72pp; English.  
 XX  
 CC The present invention relates to a method of identifying test compounds,  
 CC which inhibit or downregulate protein tyrosine phosphatase 1B (PTP1B)  
 CC expression in the liver or fat of a non-human mammal. This comprises  
 CC measuring the downregulation of the p85alpha regulatory subunit of the  
 CC phosphatidylinositol-3-kinase (PI3-K), and the upregulation of the  
 CC p50alpha and/or p55alpha isoforms of PI3-K in the liver or fat. The  
 CC method is useful for identifying inhibitors or downregulators of PTP1B  
 CC expression in the liver or fat of a non-human mammal, compounds that  
 CC increase insulin sensitivity and reduce blood glucose in an insulin  
 CC resistant non-human mammal, or compounds that downregulate the level of  
 CC expression of at least one gene involved in lipogenesis or  
 CC gluconeogenesis. These compounds are useful for treating type 2 diabetes.  
 CC The present sequence is a probe for the murine Spot14 coding sequence  
 CC used in the exemplification of the invention  
 XX  
 SQ Sequence 21 BP; 3 A; 10 C; 2 G; 6 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 16.8; DB 1; Length 21;  
 Best Local Similarity 90.0%; Pred. No. 72;  
 Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1120 CCCAGTTCACCTTCACCTC 1139  
 DB 1 CCCAGTTCACCTTCACCTC 20  
 RESULT 151  
 ABK71254  
 ID ABK71254 standard; DNA; 21 BP.  
 XX  
 AC ABK71254;  
 XX  
 DT 15-JUL-2002 (first entry)  
 XX  
 DE Mouse HYPLIP1 locus PCR primer #327.  
 XX  
 KW Human; mouse; HYPLIP1; FCHL1; familial combined hyperlipidaemia; cancer;  
 KW lipid disorder; PCR; primer; ss.  
 XX  
 OS Mus sp.  
 XX  
 PN WO200220848-A2.  
 XX  
 PD 14-MAR-2002.  
 XX  
 PF 07-SEP-2001; 2001WO-US028182.  
 XX  
 PR 08-SEP-2000; 2000US-0231322P.  
 XX  
 PA (REGC ) UNIV CALIFORNIA.  
 XX  
 PI Bodnar JS, Castellani LM, Chatterjee A, De Jong P, Lusis AJ;  
 PI Ohmen J, Ross D, Tafuri S, Wu C;  
 XX

DR WPI; 2002-329882/36.  
XX New mouse HYPLIP1 and human FCHL1 (familial combined hyperlipidemia)  
PT genes and their sequence variations, useful for diagnosing, treating or  
PT preventing lipid disorders and cancers.  
XX  
XX  
XX Claim 11; Page 77; 102pp; English.  
XX  
XX The invention relates to an isolated polynucleotide comprising a sequence  
CC variation of a mouse HYPLIP1 cDNA or a human FCHL1 (familial combined  
CC hyperlipidaemia) gene. The FCHL1 polynucleotide, the FCHL1 polypeptide or  
CC antibody immunoreactive to the FCHL1 polypeptide are useful for treating  
CC or preventing cancer associated with expression of FCHL1, as well as for  
CC treating lipid disorder. The mouse HYPLIP1 cDNA or human FCHL1 gene are  
CC also useful for diagnosing or proposing a predisposition to lipid  
CC disorder and cancer. ABK70902-ABK71303 represent mouse HYPLIP1, human  
CC FCHL1 coding sequences and PCR primers of the invention  
XX  
SQ Sequence 21 BP; 3 A; 8 C; 6 G; 4 T; 0 U; 0 Other;  
Query Match 0.8%; Score 16.8; DB 1; Length 21;  
Best Local Similarity 90.0%; Pred. No. 72;  
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 866 GCACCTGAGGACTCAGGCACC 885  
DB 1 GCTCTGAGGACTCAGGCTCC 20  
RESULT 152  
ADAL5393  
ID ADAL5393 standard; DNA; 21 BP.  
XX  
XX AC ADAL5393;  
XX  
XX 06-NOV-2003 (first entry)  
XX  
XX Mouse HYPLIP1 locus PCR primer #333.  
XX  
XX Mouse; PCR; primer; ss; HYPLIP1; FCHL1; variation; lipid disorder;  
KW allele; anti-lipid disorder; anti-cancer therapy; gene therapy;  
KW familial combined hyperlipidaemia; coronary artery disease;  
KW atherogenic lipoprotein phenotype; hyperapobetalipoproteinaemia;  
KW hypertriglyceridaemia; low density lipoprotein subclass B; LDL;  
KW familial dyslipidemic hypertension; syndrome X; hypercholesterolaemia;  
KW obesity; insulin resistance; cancer; cytostatic; antilipemic;  
KW hypotensive; anorectic.  
XX  
XX Mus sp.  
XX  
XX US2003064372-A1.  
XX  
XX 03-APR-2003.  
XX  
XX 07-SEP-2001; 2001US-00949428.  
XX  
XX 22-JUN-2000; 2000US-0213322P.  
XX  
XX (BODN/) BODNAR J S.  
PA (CAST/) CASTELLANI L W.  
PA (CHAT/) CHATTERJEE A.  
PA (JONG/) JONG P D.  
PA (LUSI/) LUSIS A J.  
PA (OHME/) OHMEN J.  
PA (ROSS/) ROSS D.  
PA (TAFU/) TAFURI S.  
PA (WUCC/) WU C.  
XX  
XX Bodnar JS, Castellani LW, Chatterjee A, Jong PD, Lusis AJ;  
PI Ohmen J, Ross D, Tafuri S, Wu C;  
XX  
XX WPI; 2003-540780/51.  
XX

PT Novel isolated polynucleotide comprising a mouse or human familial  
PT combined hyperlipidemia 1 gene having a variation that is associated with  
PT a lipid disorder, useful for identifying susceptibility to the lipid  
XX disorder.  
XX  
XX Claim 11; Page 40; 63pp; English.  
XX  
XX The invention discloses isolated polynucleotides comprising mouse HYPLIP1  
CC cDNA sequence, mouse HYPLIP1 genomic DNA, or the homologous human  
CC familial combined hyperlipidaemia 1 (FCHL1) gene, where a variation in  
CC the sequence is associated with a lipid disorder. Also claimed is an  
CC isolated polypeptide comprising a variant form of the mouse HYPLIP1 amino  
CC acid sequence, or a variant form of a fully defined human FCHL1 amino  
CC acid sequence, where the variant is associated with the lipid disorder,  
CC an isolated polynucleotide having at least 12 contiguous nucleotides of  
CC the isolated polynucleotides, where the 12 contiguous nucleotides span  
CC the variation position, an isolated polypeptide comprising 4 contiguous  
CC amino acids of the encode polypeptides, where the 4 contiguous amino  
CC acids span the variation position, a kit for the detection of the FCHL1  
CC locus comprising, an isolated antibody, identifying susceptibility to a  
CC lipid disorder which comprises comparing the nucleotide sequence of the  
CC suspected FCHL1 allele with a wild-type FCHL1 nucleotide sequence, where  
CC the difference between the suspected allele and the wild-type sequence  
CC identifies a sequence variation of FCHL1 nucleotide sequence and a  
CC pharmaceutical composition. Also disclosed is a transgenic animal which  
CC carries an altered HYPLIP1 or FCHL1 allele and a method for screening  
CC drugs for inhibition or restoration of FCHL1 gene function as an anti-  
CC lipid disorder or anti-cancer therapy. The polynucleotides, polypeptides  
CC and antibodies are useful for treating or preventing (e.g. gene therapy)  
CC a lipid disorder associated with expression of FCHL1, for diagnosis or  
CC prognosis of predisposition to lipid disorder, and cancer and for  
CC treating a lipid disorder such as familial combined hyperlipidaemia,  
CC coronary artery disease, atherogenic lipoprotein phenotype,  
CC hyperapobetalipoproteinaemia, hypertriglyceridaemia, low density  
CC lipoprotein (LDL) subclass B, familial dyslipidemic hypertension,  
CC syndrome X, hypercholesterolaemia, obesity, insulin resistance and  
CC cancer. The sequence presented is a PCR primer which was used to amplify  
XX part of the mouse HYPLIP1 locus.  
XX  
SQ Sequence 21 BP; 3 A; 8 C; 6 G; 4 T; 0 U; 0 Other;  
Query Match 0.8%; Score 16.8; DB 1; Length 21;  
Best Local Similarity 90.0%; Pred. No. 72;  
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 866 GCACCTGAGGACTCAGGCACC 885  
DB 1 GCTCTGAGGACTCAGGCTCC 20  
RESULT 153  
ADB95955  
ID ADB95955 standard; DNA; 21 BP.  
XX  
XX AC ADB95955;  
XX  
XX 04-DEC-2003 (first entry)  
XX  
XX Mouse HYPLIP1 PCR primer #333.  
XX  
XX cytostatic; antilipemic; gene therapy; peptide therapy; FCHL1;  
KW cancer; metabolic pathway; cellular mechanism; lipid disorder;  
KW familial combined hyperlipidaemia; mouse; PCR; primer; ss.  
XX  
XX Mus sp.  
XX  
XX US2003054418-A1.  
XX  
XX 20-MAR-2003.  
XX  
XX 07-SEP-2001; 2001US-00949427.  
XX  
XX 08-SEP-2000; 2000US-0231322P.  
XX

```

XX (BODN/) BODNAR J S.
PA (CAST/) CASTELLANI L W.
PA (CHAT/) CHATTERJEE A.
PA (JONG/) JONG P D.
PA (LUSI/) LUSIS A J.
PA (OHME/) OHMEN J.
PA (ROSS/) ROSS D.
PA (TAFU/) TAFURI S.
PA (WUCC/) WU C.
XX Bodnar JS, Castellani LW, Chatterjee A, Jong PD, Lusis AJ;
PI Ohmen J, Ross D, Tafuri S, Wu C;
XX WPI; 2003-695901/66.
XX Novel human FCHLI or mouse HYPLIPI polypeptide, useful for drug
PT screening, peptide therapy of lipid disorder or cancer.
XX Claim 11; Page 39; 56pp; English.
XX The invention describes an isolated polypeptide (I) comprising a variant
CC form of a mouse HYPLIPI polypeptide sequence (S1) or a human FCHLI
CC polypeptide sequence (S2), not given in the specification, where the
CC variant form is associated with cancer, or an amino acid sequence having
CC at least 65 % sequence identity to (S1) or (S2). A composition comprising
CC DNA encoding (I) is useful for treating or preventing cancer associated
CC with expression of FCHLI. FCHLI gene or HYPLIPI gene and its product are
CC useful for the study of metabolic pathway and cellular mechanism to
CC identify other genes, receptors and relationships that contribute to
CC lipid disorder and cancer. FCHLI gene or its fragments are useful in gene
CC therapy to increase the amount of the expression products of the gene for
CC the treatment of lipid disorder or cancerous cells. The sequence
CC variation of FCHLI gene or HYPLIPI gene is also useful in the diagnosis
CC and prognosis of predisposition to lipid disorder and cancer. Antisense
CC polynucleotide sequences are useful in preventing or diminishing the
CC expression of HYPLIPI or FCHLI locus. This sequence represents a primer
CC used in the analysis of the mouse HYPLIPI gene.
XX Sequence 21 BP; 3 A; 8 C; 6 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 16.8; DB 1; Length 21;
Best Local Similarity 90.0%; Pred. No. 72;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 866 GCATGAGGACTCAGGCACC 885
DB 1 GCTCTGAGGACTCAGGCTCC 20
RESULT 154
ABT05121/c
XX ID ABT05121 standard; DNA; 18 BP.
XX AC
XX ABT05121;
XX 11-OCT-2002 (first entry)
XX TNFR1 expression modulation related antisense oligo SEQ ID No 151.
XX Antisense compound; tumour necrosis factor receptor 1; liver disease;
KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
KW human; ds.
XX Homo sapiens.
XX WO200248168-A1.
XX 20-JUN-2002.
XX 22-OCT-2001; 2001WO-US051224.
XX 24-OCT-2000; 2000US-00695451.
XX (ISIS-) ISIS PHARM INC.
XX Baker BF, Cowsett LM, Zhang H, Dean NM;
XX WPI; 2002-583481/62.
XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX Example 18; Page 56; 121pp; English.
XX The invention relates to an antisense compound 8 to 30 nucleotides in
CC length targeted to nucleic acid molecule encoding tumour necrosis factor
CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
CC TNFR1. The antisense compound is useful for inhibiting the expression of
CC TNFR1 in cells or tissues. The antisense compound is also useful for
CC treating an animal (preferably human) having a disease or condition
CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
CC the expression of TNFR1. The antisense compound is useful for
CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
CC This polynucleotide sequence represents a human oligonucleotide relating
CC to the TNFR1 of the invention
XX Sequence 18 BP; 5 A; 3 C; 7 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 55;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1167 TCCCACTTTCGGGCTCC 1184
DB 18 TACCACTTTCGGGCTCC 1
RESULT 155
AAH62672
XX ID AAH62672 standard; DNA; 21 BP.
XX AC
XX AAH62672;
XX 12-SEP-2001 (first entry)
XX Glucosidase alpha acid polymorphism containing DNA fragment #573.
XX Single nucleotide polymorphism; SNP; human; cancer; inflammation;
KW heart disease; paternity testing; forensic science; ds.
XX Homo sapiens.
XX Key Location/Qualifiers
FH Variation replace(11,T)
FT /*tag= a
FT /standard_name= "single nucleotide polymorphism"
XX WO200138576-A2.
XX 31-MAY-2001.
XX 17-NOV-2000; 2000WO-US031639.
XX 24-NOV-1999; 99US-0167334P.
XX (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX Cargill M, Ireland JS, Lander ES;
XX WPI; 2001-367705/38.
XX New nucleic acid segments of the human genome, particularly from genes
PT including polymorphic sites, for phenotype correlation, forensics,

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RESULT 158  
ABT05171/c  
ID ABT05171 standard; DNA; 20 BP.  
XX  
XX  
XX AC ABT05171;  
XX  
XX  
DT 11-OCT-2002 (first entry)  
XX  
XX  
DE TNFR1 expression modulation related antisense oligo SEQ ID No 201.  
XX  
XX  
XX Antisense compound; tumour necrosis factor receptor 1; liver disease;  
KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;  
KW mouse; murine; ds.  
XX  
XX  
OS Mus sp.  
XX  
XX WO200248168-A1.  
XX  
XX  
PD 20-JUN-2002.  
XX  
XX  
PF 22-OCT-2001; 2001WO-US051224.  
XX  
XX  
PR 24-OCT-2000; 2000US-00695451.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Baker BF, Cowseert LM, Zhang H, Dean NM;  
PI WPI; 2002-583481/62.  
XX  
XX  
DR Novel antisense compound targeted to nucleic acid molecule encoding tumor  
XX  
XX  
PT necrosis factor receptor 1 (TNFR1), useful for treating humans having  
PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.  
XX  
XX  
PS Example 21; Page 61; 121pp; English.  
XX  
XX  
CC The invention relates to an antisense compound 8 to 30 nucleotides in  
CC length targeted to nucleic acid molecule encoding tumour necrosis factor  
CC receptor 1 (TNFR1), where the antisense compound inhibits expression of  
CC TNFR1. The antisense compound is useful for inhibiting the expression of  
CC TNFR1 in cells or tissues. The antisense compound is also useful for  
CC treating an animal (preferably human) having a disease or condition  
CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver  
CC injury) or a hyperproliferative disorder such as cancer, by inhibiting  
CC the expression of TNFR1. The antisense compound is useful for  
CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.  
CC This polynucleotide sequence represents a mouse oligonucleotide relating  
CC to the TNFR1 of the invention  
XX  
SQ Sequence 20 BP; 9 A; 3 C; 6 G; 2 T; 0 U; 0 Other;  
  
Query Match 0.7%; Score 15.8; DB 1; Length 20;  
Best Local Similarity 89.5%; Pred. No. 1.1e-02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
Qy 914 TTGGTCTTTGCTTTTATC 932  
Db 19 TAGGTCTTTGCTTTTATC 1  
  
RESULT 159  
ABZ87732/c  
ID ABZ87732 standard; DNA; 20 BP.  
XX  
XX  
XX AC ABZ87732;  
XX  
XX  
DT 17-OCT-2003 (first entry)  
XX  
XX  
DE Human oligonucleotide sequence.  
XX  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;

KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
XX lung inflammation; respiratory disease; ds.  
XX  
XX Homo sapiens.  
OS  
XX WO200285308-A2.  
PN  
XX  
PD 31-OCT-2002.  
XX  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
XX (EPIG-) EPIGENESIS PHARM INC.  
PA  
XX  
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
PI  
XX  
XX WPI; 2003-229219/22.  
DR  
XX  
XX  
XX Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
XX  
PS Disclosure; SEQ ID NO 2974; 872pp; English.  
XX  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine or  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 1 A; 1 C; 15 G; 3 T; 0 U; 0 Other;  
  
Query Match 0.7%; Score 15.8; DB 1; Length 20;  
Best Local Similarity 89.5%; Pred. No. 1.1e-02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
Qy 1250 ACCCCATCCCCACCCCT 1268  
Db 20 ACCCCATCCCCACCCCT 2  
  
RESULT 160  
ACF39510  
ID ACF39510 standard; DNA; 20 BP.  
XX  
XX  
XX AC ACF39510;  
XX  
XX  
DT 26-SEP-2003 (first entry)  
XX  
XX  
DE BARCODE-MAT HPV related GPV1 probe HPV111.  
XX  
XX  
KW Simultaneous detection; multiple target nucleic acid molecule;

KW biological sample; Exonuclease I; PCR; human papillomavirus; HPV;  
 KW BARCODE-MT; acute lymphoblastic leukaemia; cancer; assay;  
 KW bead array coded detection of multiple target; microarray;  
 KW targeted genetic risk-stratification; primer; probe; ss.  
 XX  
 OS Human papillomavirus.  
 OS Synthetic.  
 XX WO2003054149-A2.  
 PN  
 XX  
 PD 03-JUL-2003.  
 XX  
 XX 06-DEC-2002; 2002WO-US039223.  
 XX PF  
 XX 07-DEC-2001; 2001US-0339442P.  
 XX PR  
 XX 05-NOV-2002; 2002US-0423793P.  
 XX PR  
 XX (UYMA-) UNIV MASSACHUSETTS.  
 XX PA  
 XX Pihan G;  
 XX PI  
 XX WPI; 2003-559133/52.  
 XX DR  
 XX Simultaneously detecting the presence of multiple target nucleic acid  
 PT molecules in a biological sample for optimizing risk-adapted therapy for  
 PT a disorder by treating the enriched target nucleic acid molecules with  
 PT Exonuclease I.  
 XX  
 XX Example 2; Fig 7; 41pp; English.  
 XX  
 CC The present invention describes a method for simultaneously detecting the  
 CC presence of multiple target nucleic acid molecules in a biological sample  
 CC comprising: (a) isolating and enriching target nucleic acid molecules  
 CC from the biological sample; (b) treating the enriched target nucleic acid  
 CC molecules with Exonuclease I; (c) performing linear PCR on the  
 CC Exonuclease I treated enriched target nucleic acid molecule to produce  
 CC linear PCR product where only a single primer is used; (d) obtaining  
 CC beads coupled to an oligonucleotide molecule complementary to the  
 CC amplified target nucleic acid molecules; (e) forming a mixture by mixing  
 CC the beads and the enriched linear PCR product nucleic acid; (f) forming a  
 CC reacted sample by incubating the mixture under conditions where if the  
 CC enriched linear PCR product will hybridise to the oligonucleotide  
 CC molecule; (g) analysing the reacted sample by determining the  
 CC fluorescence of each bead analysed; and (h) detecting a level of  
 CC fluorescence on the beads, where the level of fluorescence corresponds to  
 CC a level of a target nucleic acid molecule in the biological sample. The  
 CC method for simultaneously detecting the presence of multiple target  
 CC nucleic acid molecules in a biological sample or for optimising risk-  
 CC adapted therapy for a disorder associated with the target nucleic acid.  
 CC ACF39439 to ACF39597 represent primers and probes used in the  
 CC exemplification of the present invention  
 XX  
 XX Sequence 20 BP; 11 A; 6 C; 2 G; 1 T; 0 U; 0 Other;  
 SQ Query Match 0.7%; Score 15.8; DB 1; Length 20;  
 Best Local Similarity 89.5%; Pred. No. 1.1e+02;  
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1002 GAAATCGACACTGAAAA 1020  
 DB 2 GAAACCCACACCTGAAAA 20  
 RESULT 161  
 AAV51522  
 ID AAV51522 standard; DNA; 22 BP.  
 XX  
 XX AAV51522;  
 XX  
 DT 02-FEB-1999 (first entry)  
 XX  
 XX Zea mays genome forward PCR primer #122.

XX Polymorphic marker; allele-specific; probe; amplification; PCR primer;  
 KW hybridisation; plant; hybrid certification; genetic contribution;  
 KW progeny; back-cross; hybrid; ancestry; corn; ss.  
 XX  
 OS Synthetic.  
 OS Zea mays.  
 XX WO9824796-A1.  
 PN  
 XX 11-JUN-1998.  
 PD  
 XX 01-DEC-1997; 97WO-US021782.  
 XX PF  
 XX 02-DEC-1996; 96US-0032069P.  
 XX PR  
 XX 07-MAR-1997; 97US-00813507.  
 XX PR  
 XX (AFFY-) AFFYMETRIX INC.  
 XX PA  
 XX Lemieux B, Landry BS, Sapolsky RJ, Murigneux A;  
 XX PI  
 XX WPI; 1998-333252/29.  
 XX DR  
 XX Brassica species allele-specific oligonucleotide probes and primers -  
 PT useful for plant breeding.  
 PT  
 XX Example 1; Page 52; 65pp; English.  
 XX PS  
 XX AAV51401-V51704 are forward PCR primers used to amplify fragments of the  
 CC Zea mays genome in order to detect polymorphic markers. Such markers can  
 CC be used in the construction of allele-specific primers and probes for  
 CC amplification or hybridisation, e.g. to determine common or disparate  
 CC ancestry between 2 or more plants, to monitor the genetic contribution of  
 CC an ancestral plant, to trace the progeny of proprietary plants, in  
 CC certification of a hybrid plant or to identify the progeny of a back-  
 CC crossed plant with an ancestral plant  
 XX  
 XX Sequence 22 BP; 2 A; 3 C; 7 G; 10 T; 0 U; 0 Other;  
 SQ Query Match 0.7%; Score 15.8; DB 1; Length 22;  
 Best Local Similarity 89.5%; Pred. No. 1.6e+02;  
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 902 TGGTCATTCTCTTGGTCT 920  
 DB 4 TGGTCATTCTCTTGGTCT 22  
 RESULT 162  
 AAD54478/c  
 ID AAD54478 standard; DNA; 22 BP.  
 XX  
 XX AAD54478;  
 XX  
 XX 26-JUN-2003 (first entry)  
 DT  
 XX Human BCMP 101 DNA amplifying sense PCR primer #2.  
 XX  
 XX Human; BCMP 101 protein; breast cancer; medicine; vaccine; prophylaxis;  
 KW gene therapy; antisense therapy; kidney cancer; cytostatic; PCR; primer;  
 KW ss.  
 XX  
 XX Homo sapiens.  
 OS  
 XX WO2002102849-A2.  
 XX PN  
 XX 27-DEC-2002.  
 XX PD  
 XX 14-JUN-2002; 2002WO-GB002782.  
 XX PF  
 XX 15-JUN-2001; 2001GB-00014643.  
 XX PR  
 XX 06-MAR-2002; 2002GB-00005284.  
 XX PR  
 XX



PA (OXFO-) OXFORD GLYCOSCIENCES UK LTD.  
 XX Terrett JA;  
 XX WPI; 2003-157027/15.  
 XX Novel BCMP101 polypeptide and polynucleotide encoding the polypeptide,  
 PT useful in diagnosis, prophylaxis and treatment of breast cancer and/or  
 PT kidney cancer, preferably breast cancer.  
 XX Example 3; Page 46; 47pp; English.  
 XX The present invention relates to novel human BCMP101 proteins and their  
 CC corresponding polynucleotides. BCMP 101 sequences are useful to screen  
 CC for agents that interact with BCMP101 and for screening for and/or the  
 CC diagnosis of breast cancer or monitoring and/or assessing breast cancer  
 CC treatment in a subject. They are also useful in medicine and in the  
 CC preparation of medicaments (e.g. vaccines) for use in prophylaxis and/or  
 CC treatment of breast cancer. Sequences of the invention are also useful in  
 CC gene therapy. BCMP 101 sequences are useful in antisense therapy for  
 CC treating breast cancer and/or kidney cancer. The present sequence is  
 CC human BCMP 101 DNA amplifying PCR primer. This sequence is used in the  
 CC exemplification of the invention  
 XX SQ Sequence 22 BP; 2 A; 9 C; 5 G; 6 T; 0 U; 0 Other;  
 Query Match 0.7%; Score 15.8; DB 1; Length 22;  
 Best Local Similarity 89.5%; Pred. No. 1.6e+02;  
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1179 GGCTCCCGCGAGAGGTG 1197  
 DB 21 GGCTACCGCGAGAGGTG 3  
 RESULT 163  
 AAA71903  
 ID AAA71903 standard; DNA; 22 BP.  
 XX  
 AC AAA71903;  
 XX  
 DT 12-JAN-2001 (first entry)  
 XX  
 DE Soybean RRS gene NS region primer P3 #1.  
 XX  
 KW RRS gene; roundup ready soya; plant; soybean; transgenic; food;  
 KW food product; NS region; primer; ss.  
 XX  
 OS Glycine max.  
 XX  
 PN DE19906169-A1.  
 XX  
 PD 10-AUG-2000.  
 XX  
 PF 08-FEB-1999; 99DE-01006169.  
 XX  
 PR 08-FEB-1999; 99DE-01006169.  
 XX  
 PA (BIOT-) BIOINSIDE GES BIODIAGNOSTIK AUFTRAGSFORS.  
 XX  
 PI Lauter F., Grohmann L., Staesche R;  
 XX  
 DR WPI; 2000-533917/49.  
 XX  
 PT Quantitative determination of genetically modified DNA in food, useful  
 PT particularly for detecting Roundup Ready soya, by fluorescence-coupled  
 PT polymerase chain reaction.  
 XX  
 PS Claim 7; Page 10; 14pp; German.  
 XX  
 PS This invention describes a novel method for the quantitative  
 CC determination of genetically modified DNA (transgene, (I)) in foods by  
 CC fluorescence-coupled polymerase chain reaction (PCR) based on extraction

CC of total DNA from the food sample. The amount of (I) is determined by  
 CC PCR, in a first reaction vessel, using two (I)-specific primers (P1, P2)  
 CC and a (I)-specific fluorescent probe (S1), and the change in fluorescence  
 CC measured relative to a control. The internal amplification control (CI)  
 CC is a synthetic gene fragment having two binding sites for P1 and P2 and a  
 CC binding site for a fluorescently labeled probe (S2) that differs from S1  
 CC both in sequence and nature of its fluorescent label. In a second  
 CC reaction vessel a reference gene (II) in (A) is measured similarly, using  
 CC a probe (S3) and (II)-specific primers (P3, P4), with the change in  
 CC fluorescence measured relative to a second control (C2) that has binding  
 CC sites for P3, P4 and S2. S3 differs in both sequence and label from S2.  
 CC The proportion of genetically altered DNA is then calculated from the  
 CC ratio of amount of (I) to amount of (II). The method is especially used  
 CC to detect Roundup Ready soya (RRS) in foods and food products, but may be  
 CC applied to other transgenes in plants, e.g. the Bt-176 gene in transgenic  
 CC maize. The method avoids risks of contamination and is highly  
 CC automatable, reproducible, sensitive and specific. This sequence  
 CC represents a primer used to detect the NS region from the RRS gene which  
 CC is used in the method of the invention  
 XX SQ Sequence 22 BP; 3 A; 14 C; 1 G; 4 T; 0 U; 0 Other;  
 Query Match 0.7%; Score 15.6; DB 1; Length 22;  
 Best Local Similarity 81.8%; Pred. No. 1.8e+02;  
 Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 QY 1237 GCCTCGCTCGAGCCCATCC 1258  
 DB 1 GCCTCTACTCCACCCCATCC 22  
 RESULT 164  
 AAX82809  
 ID AAX82809 standard; DNA; 22 BP.  
 XX  
 AC AAX82809;  
 XX  
 DT 29-JUN-2000 (first entry)  
 XX  
 DE Soybean cytochrome b PCR primer 1U.  
 XX  
 KW Cytochrome b; soybean; PCR primer; forensic; raw materials; cosmetic;  
 KW contamination; ss.  
 XX  
 OS Glycine max.  
 XX  
 PN DE19842991-A1.  
 XX  
 PD 23-MAR-2000.  
 XX  
 PF 21-SEP-1998; 98DE-01042991.  
 XX  
 PR 21-SEP-1998; 98DE-01042991.  
 XX  
 PA (BEHR/) BEHRENS M.  
 PA (UNTH/) UNTHAN M.  
 PA (LATU/) LATUS N.  
 XX  
 PI Behrens M, Unthan M, Latus N;  
 XX  
 DR WPI; 2000-257940/23.  
 XX  
 PT Novel methods and primers for genetic analysis of biological material by  
 PT polymerase chain reaction using specific primer pairs useful in, e.g.  
 PT forensic medicine.  
 XX  
 PS Claim 7; Col 5; 10pp; German.  
 XX  
 PS This invention describes a novel method for determining the origin of  
 CC biological material by PCR using specific primers pairs, which are  
 CC exclusively complementary to the respective animal or plant DNA. The  
 CC method and primers are useful in forensic medicine or in purity testing  
 CC raw materials, end products, cosmetics or pharmaceuticals. The methods

CC are useful for determining if there has been contamination of biological  
CC materials. AAX82791-X82812 represent the PCR primers used to illustrate  
CC the method of the invention

XX SQ Sequence 22 BP; 3 A; 14 C; 1 G; 4 T; 0 U; 0 Other;  
Query Match 0.7%; Score 15.6; DB 1; Length 22;  
Best Local Similarity 81.8%; Pred. No. 1.8e+02;  
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Oy 1237 GCCCTGCGCTCCGACCCCATCC 1258  
Db 1 GCCCTCTACTCCACCCCATCC 22

## RESULT 165

ACC69308  
ID ACC69308 standard; DNA; 22 BP.

XX AC  
XX ACC69308;

XX 15-JUL-2003 (first entry)

XX RRS nucleic acid fragment related PCR primer Le1n01 5' SEQ ID NO:3.

XX Quantitative; determination; genetically-modified agricultural product;  
XX soybean; maize; RRS; roundup ready soybean; PCR primer; ss.

XX Glycine max.  
XX Synthetic.

XX WO2003027283-A1.

XX 03-APR-2003.

XX 24-SEP-2002; 2002WO-JP009773.

XX 21-SEP-2001; 2001JP-00289755.

XX (NORO) NAT FOOD RES INST MIN AGRIC.  
XX (SHOS) SHOWA SANGYO CO.  
XX (NIFL-) NIPPON FLOUR MILLS CO LTD.

XX Katoh H, Ohhashi H, Hino A, Matsuoka T, Kuribara H, Futo S;

XX WPI; 2003-363215/34.

XX Competitive nucleic acid fragments applicable in quantifying recombinant  
XX genes by PCR, useful in identifying genetically-modified agricultural  
XX products and similar materials e.g. soybean and maize.

XX Example 1; Page 11; 39pp; Japanese.

XX The present invention describes a competitive nucleic acid fragment which  
XX contains at least one first competitive nucleic acid molecule  
XX corresponding to the endogenous gene moiety of a recombinant gene which  
XX is bonded to at least one second competitive nucleic acid molecule  
XX corresponding to a gene specific to the recombinant gene moiety of the  
XX recombinant gene located on the same nucleic acid. Also described: (1) a  
XX kit for quantifying the gene of a recombinant gene containing the  
XX competitive nucleic acid fragment, a first pair of primers for amplifying  
XX the first competitive nucleic acid molecule of the endogenous gene of the  
XX gene of such recombinant gene, and a second pair of primers for  
XX amplifying the second competitive nucleic acid molecule of the recombinant  
XX gene of the gene of such recombinant gene; and (2) quantifying the gene  
XX of a gene recombinant by carrying out competitive PCR with use of the  
XX competitive nucleic acid fragment or the kit. The nucleic acid fragments  
XX are useful in identifying genetically-modified agricultural products and  
XX similar materials e.g. soybean and maize. The present sequence represents  
XX a PCR primer used in the amplification of an RRS (roundup ready soybean)  
XX nucleic acid fragment, which is used in an example from the present  
XX invention

SQ Sequence 22 BP; 3 A; 14 C; 1 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 15.6; DB 1; Length 22;  
Best Local Similarity 81.8%; Pred. No. 1.8e+02;  
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Oy 1237 GCCCTGCGCTCCGACCCCATCC 1258  
Db 1 GCCCTCTACTCCACCCCATCC 22

## RESULT 166

AAX74507/C

ID AAX74507 standard; RNA; 17 BP.

XX AC  
XX AAX74507;

XX 28-JUL-1999 (first entry)

XX Mouse flt-1 VEGF receptor hammerhead ribozyme substrate #35.

XX Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;  
XX KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;  
XX tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;  
XX fms-like tyrosine kinase 1; kinase insert domain containing receptor;  
XX foetal liver kinase 1; ss.

XX Mus sp.

XX WO9715662-A2.

XX 01-MAY-1997.

XX 25-OCT-1996; 96WO-US017480.

XX 26-OCT-1995; 95US-0005974P.

XX 11-JAN-1996; 96US-00584040.

XX (RIBO-) RIBOZYME PHARM INC.

XX (CHIR) CHIRON CORP.

XX Pavco P, Meswigen J, Stinchcomb D, Escobedo J;

XX WPI; 1997-259017/23.

XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA  
XX stability - useful for treating e.g. tumour angiogenesis, psoriasis,  
XX rheumatoid arthritis, etc., in a human patient.

XX Claim 4; Page 156; 218pp; English.

XX The present invention describes nucleic acid molecules which modulate the  
XX synthesis, expression and/or stability of a mRNA encoding 1 or more  
XX receptors of vascular endothelial growth factor (VEGF). A patient  
XX (preferably human) having a condition associated with the level of the  
XX fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing  
XX receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour  
XX angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be  
XX treated by administering the nucleic acid molecule or the expression  
XX vector to the patient. AAX67275 to AAX75752 represent specific examples  
XX of nucleic acid molecules from the present invention

SQ Sequence 17 BP; 7 A; 2 C; 7 G; 0 T; 1 U; 0 Other;

Query Match 0.7%; Score 15.4; DB 1; Length 17;  
Best Local Similarity 94.1%; Pred. No. 85;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Oy 921 TTGCTTTTATCCCTCC 937  
Db 17 TTGCTTTTATCCCTCC 1

RESULT 167  
ACD50663  
ID ACD50663 standard; RNA; 17 BP.  
XX  
AC ACD50663;  
XX  
DT 23-SEP-2003 (first entry)  
DE HBV hammerhead ribozyme substrate sequence #180.  
XX  
KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;  
KW RNA stability; RNA expression; RNA synthesis; antisense;  
KW enzymatic nucleic acid; hammerhead ribozyme; DNzyme; zinzyme;  
KW amberyne; G-cleaver ribozyme; decoy molecule; aptamer;  
KW HBV reverse transcriptase; Enhancer I region; viral replication;  
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;  
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;  
KW virucide; antiinflammatory; substrate; ss.  
XX  
OS Hepatitis B virus.  
XX  
PN WO200281494-A1.  
XX  
PD 17-OCT-2002.  
XX  
PF 26-MAR-2002; 2002WO-US009187.  
XX  
PR 26-MAR-2001; 2001US-00817879.  
PR 08-JUN-2001; 2001US-00877478.  
PR 08-JUN-2001; 2001US-0296876P.  
PR 24-OCT-2001; 2001US-0335059P.  
PR 05-DEC-2001; 2001US-0337055P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
PA (BLAT/) BLAT L.  
PA (MACE/) MACEJAK D.  
PA (MCSW/) MCSWIGGEN J.  
PA (MORR/) MORRISSEY D.  
PA (PAVC/) PAVCO P.  
PA (LEEP/) LEE P.  
PA (DRAP/) DRAPER K.  
PA (ROBE/) ROBERTS E.  
XX  
PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;  
PI Draper K, Roberts E;  
XX  
WPI; 2003-229207/22.  
XX  
PT Novel compound useful for treating cirrhosis, liver failure,  
PT hepatocellular carcinoma, or condition associated with hepatitis C virus  
PT infection.  
XX  
PS Example 1; Page 139; 387pp; English.  
XX  
CC The present invention relates to nucleic acid molecules which modulate  
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or  
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense  
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNzymes,  
CC inozymes, zinzymes, amberyne, and G-cleaver ribozymes. Also disclosed  
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse  
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well  
CC as oligonucleotides that specifically bind the Enhancer I region of HBV  
CC DNA. The nucleic acids may be used to modulate the expression of HBV  
CC genes and HBV viral replication. Also disclosed is a method for screening  
CC compounds and/or potential therapies directed against HBV, and compounds  
CC that modulate the expression and/or replication of HCV. The compounds and  
CC methods of the invention are useful for the treatment of degenerative and  
CC disease states related to HBV and HCV infection, replication and gene  
CC expression such as cirrhosis, liver failure, and hepatocellular  
CC carcinoma. The present sequence represents a substrate for one of the HBV  
CC ribozyme, inozyme, G-cleaver, zinzyme, DNzyme or amberyne sequences  
CC disclosed in the present invention  
XX

SQ Sequence 17 BP; 1 A; 2 C; 2 G; 0 T; 12 U; 0 Other;  
Query Match 0.7%; Score 15.4; DB 1; Length 17;  
Best Local Similarity 29.4%; Pred. No. 85;  
Matches 5; Conservative 11; Mismatches 1; Indels 0; Gaps 0;  
QY 907 ATTTTCTTTGGTCTTGG 923  
|:::|:::|:::|:::|  
DB 1 AUUUUUUUUUUUUUUG 17  
RESULT 168  
AAT16398/c  
ID AAT16398 standard; DNA; 18 BP.  
XX  
AC AAT16398;  
XX  
DT 13-SEP-1996 (first entry)  
DE  
DE Primer #1 for SWS2359 human obesity gene.  
XX  
KW Obesity; mouse; OBP; leptin; hormone; body weight regulation; diabetes;  
KW food intake; energy expenditure; high blood pressure; cholesterol; human;  
KW gene therapy; antibody; cancer; Kobe beef; Foie gras; immunoassay; PCR;  
KW primer; amplify; polymerase chain reaction; ss.  
XX  
OS Synthetic.  
XX  
PN GB2292382-A.  
XX  
PD 21-FEB-1996.  
XX  
PF 17-AUG-1995; 95GB-00016947.  
XX  
PR 17-AUG-1994; 94US-00292345.  
PR 30-NOV-1994; 94US-00347563.  
PR 10-MAY-1995; 95US-00438431.  
PR 07-JUN-1995; 95US-00483211.  
XX  
PA (UYRQ) UNIV ROCKEFELLER.  
XX  
PI Friedman JM, Zhang Y, Proenca R, Maffei M, Halaas JL, Gajiwala K;  
PI Burley SK;  
XX  
XX WPI; 1996-099009/11.  
XX  
PT Obesity polypeptide(s) able to modulate body wt. - useful for e.g.  
PT reducing wt. in treatment of diabetes, high blood pressure and high  
PT cholesterol and for cosmetic reasons.  
XX  
PS Example 10; Page 141; 304pp; English.  
XX  
CC AAT16392-T16429 represent amplification primers for the human obesity  
CC polypeptide (OBP) gene sequence (see AAT16373). These sequences were used  
CC to amplify the OBP gene sequence from the YAC contig containing the human  
CC OBP gene, in a series of sequence tagged-site (STS)-specific PCR assays.  
CC There were 19 STSs found within the YAC contig human OBP gene sequence.  
CC This sequence was used in conjunction with AAT16399 to amplify the STS  
CC SWS2359. OBP has effects on both food intake and energy expenditure. OBP  
CC and its analogues are useful for modifying body weight (optionally  
CC combined with known medicaments), for treating diabetes, high blood  
CC pressure or high cholesterol. The OBP coding sequence (and sequences  
CC complementary to it) can be used in gene therapy for modifying body  
CC weight. The protein can be used for reducing weight for health or  
CC cosmetic reasons in obese humans, or to produce leaner food animals.  
CC Antagonists of OBP (including antibodies) are useful for increasing body  
CC weight, e.g. for treating weight loss associated with cancer, or for  
CC cosmetic reasons in humans, or for production of Kobe beef or Foie gras  
CC in domestic animals. OBP antibodies (Ab) can also be used in diagnostic  
CC immunoassays for the presence of OBP. The formation of Ab-OBP complexes  
CC enables in vitro evaluation of levels of OBP in a sample, especially to  
CC detect diseases associated with elevated or decreased levels, and to  
CC monitor treatment of these diseases  
XX

```

XX SQ Sequence 18 BP; 1 A; 3 C; 5 G; 9 T; 0 U; 0 Other;
    Query Match      0.7%; Score 15.4; DB 1; Length 18;
    Best Local Similarity 94.1%; Pred. No. 1e+02;
    Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 730 CAGGAGAAACAGAACAC 746
    ||||| ||||| |||||
Db 18 CAGGAGAAACACACAC 2

RESULT 169
AAC62593/c
ID AAC62593 standard; DNA; 18 BP.
XX AC AAC62593;
XX AC
XX DT 01-FEB-2001 (first entry)
XX DE Human OB gene sequence tagged-site-specific PCR primer #7.
XX KW Human; mouse; OB gene; obesity; adiposity; body weight; PCR primer; ss.
XX OS Homo sapiens.
XX PN US6124448-A.
XX PD 26-SEP-2000.
XX PF 07-JUN-1995; 95US-00488208.
XX PR 17-AUG-1994; 94US-00292345.
XX PR 30-NOV-1994; 94US-00347563.
XX PR 10-MAY-1995; 95US-00438431.
XX PA (UYRQ ) UNIV ROCKEFELLER.
XX PI Maffei M, Proenca R, Zhang Y, Friedman JM;
XX DR WPI; 2000-601556/57.
XX CC Nucleic acid primers and probes useful for detecting mutations in
XX CC mammalian OB gene associated with regulation of body weight and
XX CC adiposity.
XX PS Example 10; Col 80; 153pp; English.
XX CC The present sequence is a PCR primer which was used in an invention
XX CC relating to the control of body weight of animals including humans.
XX CC Nucleic acids of at least 10 nucleotides which are hybridisable to a non-
XX CC coding region of an OB nucleic acid have been created. The OB gene plays
XX CC a critical role in the regulation of body weight and adiposity. The
XX CC nucleic acids may be used as probes or as primers for PCR. They are
XX CC useful for evaluating the presence of mutations in the human OB gene or
XX CC for evaluating the level of expression of OB mRNA. Defects associated
XX CC with OB gene expression result in obese phenotypes
XX SQ Sequence 18 BP; 1 A; 3 C; 5 G; 9 T; 0 U; 0 Other;
    Query Match      0.7%; Score 15.4; DB 1; Length 18;
    Best Local Similarity 94.1%; Pred. No. 1e+02;
    Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 730 CAGGAGAAACAGAACAC 746
    ||||| ||||| |||||
Db 18 CAGGAGAAACACACAC 2

RESULT 170
AAAL2315/c
ID AAAL2315 standard; DNA; 18 BP.
XX AC
XX AC
XX DT 01-FEB-2001 (first entry)
XX DE Human OB gene sequence tagged-site-specific PCR primer #7.
XX KW Human; mouse; anabolic; cytostatic; immunostimulant;
XX KW OB polypeptide inhibitor; body weight; obesity; OB gene; cancer; AIDS;
XX KW anorexia nervosa; hypertension; heart disease; Type II diabetes;
XX KW PCR primer; ss.
XX OS Homo sapiens.

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AC AAAL2315;
XX DT 18-AUG-2000 (first entry)
XX DE Human OB DNA PCR primer sWSS2359 #1.
XX KW OB gene; body weight; obesity; anorectic; adipose tissue; brain; human;
XX KW PCR primer; ss.
XX OS Homo sapiens.
XX PN US6048837-A.
XX PD 11-APR-2000.
XX PF 07-JUN-1995; 95US-00485942.
XX PR 17-AUG-1994; 94US-00292345.
XX PR 30-NOV-1994; 94US-00347563.
XX PR 10-MAY-1995; 95US-00438431.
XX PA (UYRQ ) UNIV ROCKEFELLER.
XX PI Proenca R, Zhang Y, Friedman JM;
XX DR WPI; 2000-302788/26.
XX CC Modifying body weight of an animal comprises administering mammalian
XX CC obesity polypeptide obtained from humans and murine.
XX PS Example 10; Col 133-134; 153pp; English.
XX CC This invention describes a novel method for modifying body weight of an
XX CC animal which comprises administering mammalian obesity (OB) polypeptide.
XX CC The products of the invention have anorectic activity. The OB polypeptide
XX CC at a dose of 5 mg/g/day in 300 micro litres of PBS was injected
XX CC intraperitoneally into mice. Control mice were injected with PBS
XX CC dialysate of the recombinant protein. The body weight of the mice was
XX CC noted. The results shows that recombinant the OB polypeptide is capable
XX CC of reducing a body weight and is found to be effective when it is
XX CC administered daily. The OB polypeptide acts as a part of the signalling
XX CC pathway by which adipose tissue communicates with the brain and other
XX CC organs. (1) is useful for modulating body weight of an animal especially
XX CC humans. This sequence represents a PCR primer used in the amplification
XX CC of a human OB protein described in the method of the invention
XX SQ Sequence 18 BP; 1 A; 3 C; 5 G; 9 T; 0 U; 0 Other;
    Query Match      0.7%; Score 15.4; DB 1; Length 18;
    Best Local Similarity 94.1%; Pred. No. 1e+02;
    Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 730 CAGGAGAAACAGAACAC 746
    ||||| ||||| |||||
Db 18 CAGGAGAAACACACAC 2

RESULT 171
AAC62673/c
ID AAC62673 standard; DNA; 18 BP.
XX AC AAC62673;
XX DT 01-FEB-2001 (first entry)
XX DE Human OB gene sequence tagged-site-specific PCR primer #7.
XX KW Human; mouse; anabolic; cytostatic; immunostimulant;
XX KW OB polypeptide inhibitor; body weight; obesity; OB gene; cancer; AIDS;
XX KW anorexia nervosa; hypertension; heart disease; Type II diabetes;
XX KW PCR primer; ss.
XX OS Homo sapiens.

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XX PN US6124439-A.
XX PD
XX PF 26-SEP-2000.
XX PI 07-JUN-1995; 95US-00488214.
XX PR 17-AUG-1994; 94US-00292345.
XX PR 30-NOV-1994; 94US-00347563.
XX PR 10-MAY-1995; 95US-00438431.
XX PA (UVRQ ) UNIV ROCKEFELLER.
XX PS
XX PI Proenca R, Zhang Y, Friedman JM;
XX DR WPI; 2000-611018/58.
XX PT Novel antibody to mammalian obesity polypeptide useful for diagnosis and
XX PT treatment of weight loss associated with disorders such as cancer, AIDS
XX PT and anorexia nervosa.
XX PS Example 10; Col 80; 150pp; English.
XX CC The present sequence is a PCR primer which was used in an invention
XX CC relating to the control of body weight of animals including humans.
XX CC Antibodies against the mammalian obesity (OB) polypeptide have been
XX CC identified. The antibodies are useful for modulating the activity of OB
XX CC to control body weight and fat content and/or to treat certain
XX CC pathological conditions in which there is abnormal depression or
XX CC elevation of body weight. The antibodies are used to treat weight loss
XX CC associated with cancer, AIDS and anorexia nervosa. They are useful for
XX CC the diagnosis of nutritional disorders such as obesity and diseases
XX CC associated with obesity, such as hypertension, heart disease and Type II
XX CC diabetes. The kits are used to determine the presence or amount of OB in
XX CC the blood or plasma of an individual
XX SQ Sequence 18 BP; 1 A; 3 C; 5 G; 9 T; 0 U; 0 Other;
Query Match 0.7%; Score 15.4; DB 1; Length 18;
Best Local Similarity 94.1%; Pred. No. 1e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 730 CAGGAGAAACAGAACAC 746
Db 18 CAGGAGAAACAGAACAC 2
RESULT 172
ABX89547/c
XX ID ABX89547 standard; DNA; 18 BP.
XX AC ABX89547;
XX DT 08-MAY-2003 (first entry)
XX DE Human sequence tagged specific PCR primer sWss2359 #1.
XX KW ss; human; obese polypeptide; body weight; PCR; ob polypeptide; leptin;
XX KW adipocyte; appetite reduction; cosmetic; primer; fat deposit reduction;
XX KW improved body appearance; heart disease; obesity; agricutlure;
XX KW nutritional disorder; cancer associated weight loss; type II diabetes;
XX KW obesity associated disease; AIDS associated weight loss; hypertension;
XX KW gene therapy.
XX OS Homo sapiens.
XX PN US2002107211-A1.
XX PD 08-AUG-2002.
XX PR 13-DEC-2000; 2000US-00736084.
XX PF
XX PR 07-JUN-1995; 95US-00485943.
XX
XX PA (UVRQ ) UNIV ROCKEFELLER.
XX PS
XX PI Friedman JM, Halaas JL, Gajiwala K, Burley SK, Zhang Y;
XX PI Proenca R, Maffei M;
XX DR WPI; 2002-722695/78.
XX PT New obese polypeptide useful for inducing reduction of body weight in an
XX PT animal, for preparing a composition for treating obesity, disease
XX PT associated with obesity such as hypertension, heart disease or type II
XX PT diabetes.
XX PS Example 10; Page 44; 144pp; English.
XX CC The invention relates to an obese (ob) polypeptide, also known as leptin,
XX CC expressed predominantly by adipocytes and capable of inducing reduction
XX CC of body weight in an animal. The polypeptide is useful for monitoring
XX CC therapeutic treatment of a disease associated with elevated or decreased
XX CC levels of ob polypeptide in a mammalian subject; for use in
XX CC radioimmunoassays for measuring fat and/or plasma levels of ob protein or
XX CC for detecting the presence and level of receptor for ob on tissues, such
XX CC as hypothalamus; for screening expression libraries to isolate active
XX CC receptors; for use in cosmetics by improving body appearance by reducing
XX CC fat deposits or appetite or both and is used independently or in
XX CC conjunction with other cosmetic strategies e.g. surgery for its cosmetic
XX CC effect; for identifying agonists or antagonists that affect its activity
XX CC and has potential agricultural uses e.g. increasing the body weight of
XX CC animals. Nucleic acid encoding the polypeptide is useful for identifying
XX CC mutation in ob nucleotide, in gene therapy for obesity and in the
XX CC measurement of its encoded RNA and protein in nutritional disorders. A
XX CC host cell transfected with a vector expressing the polypeptide is useful
XX CC in the preparation of modulators of the polypeptide and its nucleic acid.
XX CC An immunogenic fragment of the polypeptide is useful for preparing an
XX CC antibody. The antibody is useful for measuring the presence of the
XX CC polypeptide in a sample; for evaluating the level of ob polypeptide in a
XX CC biological sample to detect or diagnose the presence of a disease
XX CC associated with elevated or decreased levels of ob polypeptide in a
XX CC mammalian subject; for imaging ob polypeptide in situ. A composition
XX CC comprising the polypeptide is useful for reducing body weight of an
XX CC animal, in particular humans. A composition comprising an antagonist of
XX CC the polypeptide is useful for increasing body weight of an animal.
XX CC Compositions containing the polypeptide and the antagonist are useful for
XX CC treating obesity, weight loss associated with cancer or AIDS, disease
XX CC associated with obesity such as hypertension, heart disease or type II
XX CC diabetes. The present sequence represents a human sequence tagged
XX CC specific PCR primer
XX SQ Sequence 18 BP; 1 A; 3 C; 5 G; 9 T; 0 U; 0 Other;
Query Match 0.7%; Score 15.4; DB 1; Length 18;
Best Local Similarity 94.1%; Pred. No. 1e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 730 CAGGAGAAACAGAACAC 746
Db 18 CAGGAGAAACAGAACAC 2
RESULT 173
ABL61421/c
XX ID ABL61421 standard; DNA; 18 BP.
XX AC ABL61421;
XX DT 16-OCT-2002 (first entry)
XX DE Human Ob gene STS sWSS2359 AFMA065zg9 PCR primer #1.
XX KW Ob; human; obese; adiposity; body weight; anorectic; anabolic; PCR;
XX KW primer; chromosome 7; STS; sequence tagged site; 7q31.3;
XX KW microsatellite marker; ss.

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OS Homo sapiens.
XX
XX US6350730-B1.
XX
XX
XX PD 26-FEB-2002.
XX
XX PF 07-JUN-1995; 95US-00488223.
XX
XX 17-AUG-1994; 94US-00292345.
XX PR 30-NOV-1994; 94US-00347563.
XX PR 10-MAY-1995; 95US-00438431.
XX
XX PA (UYRQ ) UNIV ROCKEFELLER.
XX
XX FI Friedman JM, Zhang Y, Proenca R;
XX WPI; 2002-412914/44.
XX
XX PT Modifying the body weight of an animal comprises administering an obese
XX gene (OB) polypeptide analog.
XX
XX PS Example 10; Col 79-80; 152pp; English.
XX
XX CC This invention describes a novel method of modifying the body weight of
XX an animal comprising administering an obese gene (OB) polypeptide
XX analogue, capable of modulating body weight and adiposity. The invention
XX has anorectic and anabolic activity. ABL61415-ABL61468 represent PCR
XX primers used in the detection of sequence tagged sites (STS's) and
XX microsatellite markers used in the mapping of the human Ob gene onto
XX chromosome 7. These genetic markers represent an important tool for
XX studying the possible role of the Ob gene in inherited forms of human
XX obesity
XX
XX SQ Sequence 18 BP; 1 A; 3 C; 5 G; 9 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 15.4; DB 1; Length 18;
XX Best Local Similarity 94.1%; Pred. NO. 1e+02;
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 730 CAGGAGAAACAGAACAC 746
XX |||||
XX Db 18 CAGGAGAAACAGAACAC 2
XX
XX RESULT 174
XX ABX96407/c
XX ID ABX96407 standard; DNA; 18 BP.
XX
XX AC ABX96407;
XX
XX DT 13-MAY-2003 (first entry)
XX
XX DE Human obese (ob) gene associated PCR primer #7.
XX
XX KW OB polypeptide; obese polypeptide; leptin; body weight; obesity;
XX weight gain; protein therapy; weight loss; cancer; AIDS; human;
XX acquired immunodeficiency syndrome; anorexia nervosa; PCR; primer; ss.
XX
XX OS Homo sapiens.
XX
XX FN US6471956-B1.
XX
XX PD 29-OCT-2002.
XX
XX PF 07-JUN-1995; 95US-00488225.
XX
XX PR 17-AUG-1994; 94US-00292345.
XX PR 30-NOV-1994; 94US-00347563.
XX PR 10-MAY-1995; 95US-00438431.
XX
XX PA (UYRQ ) UNIV ROCKEFELLER.
XX
XX FI Friedman JM, Zhang Y, Proenca R;

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XX WPI; 2003-298093/29.
XX
XX PT New human or mouse OB polypeptide, also referred to as leptin
XX polypeptide, which is capable of modulating body weight, useful for
XX treating obesity.
XX
XX PS Example 10; Col 79-80; 153pp; English.
XX
XX CC The invention describes an OB (obese) polypeptide (also referred as
XX leptin) (I), capable of modulating body weight, comprising amino acids 22
XX - 167 of a human or mouse OB polypeptide sequence of 167 amino acids
XX (S1), given in the specification, or amino acids 22 - 166 a human or
XX mouse OB polypeptide sequence of 166 amino acids (S2), given in the
XX specification. The OB polypeptide is useful for reducing body weight in
XX conditions of obesity, and as a target for neutralising antibodies which
XX results in weight gain (protein therapy), for treating weight loss
XX associated with cancer, acquired immunodeficiency syndrome (AIDS) or
XX anorexia nervosa. This sequence represents a primer associated with the
XX isolation of the human obese (ob) or leptin gene
XX
XX SQ Sequence 18 BP; 1 A; 3 C; 5 G; 9 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 15.4; DB 1; Length 18;
XX Best Local Similarity 94.1%; Pred. NO. 1e+02;
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 730 CAGGAGAAACAGAACAC 746
XX |||||
XX Db 18 CAGGAGAAACAGAACAC 2
XX
XX RESULT 175
XX AAA85678/c
XX ID AAA85678 standard; DNA; 19 BP.
XX
XX AC AAA85678;
XX
XX DT 04-DEC-2000 (first entry)
XX
XX DE Cyclin B1 ribozyme binding site #7.
XX
XX KW Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX
XX OS Mammalia.
XX
XX PN WO200032765-A2.
XX
XX PD 08-JUN-2000.
XX
XX PF 06-DEC-1999; 99WO-US028772.
XX
XX PR 04-DEC-1998; 98US-0110954P.
XX
XX PA (IMMU-) IMMUSOL INC.
XX
XX PI Tritz R, Welch PJ, Barber JR, Robbins JM;
XX
XX WPI; 2000-412314/35.
XX
XX PT New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
XX RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
XX PCNA and Cyclin B1.
XX
XX PS Disclosure; Page 96; 109pp; English.
XX
XX CC The present invention relates to a hairpin or hammerhead ribozyme,
XX designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
XX other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
XX Representative examples of ribozyme recognition sites are given in
XX AAA82415 to AAA86787. The ribozyme of the invention is useful for
XX inhibiting restenosis by introduction of the ribozyme into cells. The
XX ribozyme is resistant to endonuclease activity and hence is efficient in

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CC restenosis treatment
XX Sequence 19 BP; 0 A; 7 C; 4 G; 8 T; 0 U; 0 Other;
SQ
  Query Match      0.7%; Score 15.4; DB 1; Length 19;
  Best Local Similarity 94.1%; Pred. No. 1.2e+02;
  Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
  QY 732 GGAGAAACAGAACACCG 748
  Db 19 GGAGAGCAGAACACCG 3

RESULT 176
AAH60840/c
ID AAH60840 standard; DNA; 19 BP.
XX
AC AAH60840;
XX
DT 10-SEP-2001 (first entry)
XX
DE Cyclin B1 ribozyme binding site SEQ ID NO:3264.
XX
KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW recognition site; target; ribozyme binding site; eye disease; vulnary;
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
KW antiposoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
KW anisickling; ophthalmological; keratolytic; gene therapy; viral wart;
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW basal cell carcinoma; seborrheic wart; squamous cell carcinoma;
KW sickle cell retinopathy; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
XX WO200130362-A2.
XX
XX 03-MAY-2001.
XX
XX 26-OCT-2000; 2000WO-US029500.
XX
XX 26-OCT-1999; 99US-0161532P.
XX
XX (IMMU-) IMMUSOL INC.
XX
XX Robbins JM, Tritz R;
XX
XX WPI; 2001-300427/31.
XX
XX Treating proliferative skin or eye diseases and scarring, using ribozymes
XX that cleave RNA encoding cytokines involved in inflammation, matrix
XX metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
XX Example 1; Page 309; 408pp; English.
XX
XX The present invention describes a method for treating a proliferative
XX skin or eye disease and scarring. The method involves administering a
XX ribozyme (I) which cleaves RNA encoding a cytokine involved in
XX inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
XX dependent kinase, growth factor or a reductase, or administering a
XX nucleic acid molecule (II) comprising a promoter operably linked to a
XX nucleic acid segment encoding (I). (I) can have antiposoriatic,
XX dermatological, cytostatic, antiseborrheic, antidiabetic, anisickling,
XX ophthalmological, vulnary, keratolytic and virucide activities, and
XX cleaves RNA encoding cytokine involved in inflammation. (I) can be used
XX in gene therapy. (I) and (II) are useful for treating proliferative skin
XX diseases such as psoriasis, atopic dermatitis, actinic keratosis,
XX squamous or basal cell carcinoma and viral or seborrheic wart. They can
XX also be used for treating proliferative eye diseases such as diabetic
XX retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
XX prematurity and retinal detachment, and for treating and preventing

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CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC scar. AAH57577 to AAH62099 represent sequences used in the
CC exemplification of the present invention
XX
SQ Sequence 19 BP; 0 A; 7 C; 4 G; 8 T; 0 U; 0 Other;
  Query Match      0.7%; Score 15.4; DB 1; Length 19;
  Best Local Similarity 94.1%; Pred. No. 1.2e+02;
  Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
  QY 732 GGAGAAACAGAACACCG 748
  Db 19 GGAGAGCAGAACACCG 3

RESULT 177
AAQ73379/c
ID AAQ73379 standard; DNA; 20 BP.
XX
AC AAQ73379;
XX
DT 25-MAR-2003 (revised)
DT 02-MAY-1995 (first entry)
XX
DE Anti-HSV-1 G4 oligo #5652.
XX
KW Hybridise; herpes simplex virus; HSV; open reading frame;
KW translation initiation site; coding region; 5' UTR; ss.
XX
OS Synthetic.
XX
XX WO9419945-A1.
XX
XX 15-SEP-1994.
XX
XX 07-MAR-1994; 94WO-US002471.
XX
XX 12-MAR-1993; 93US-00031147.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Draper KG, Crooke ST, Mirabelli CK, Ecker DJ, Hanecak R;
XX Anderson KP, Brown-Driver VL, Wyatt JR;
XX
XX WPI; 1994-302552/37.
XX
XX New oligonucleotide(s) hybridising with DNA or RNA of herpesvirus gene -
XX are used in the treatment and diagnosis of herpes simplex virus,
XX cytomegalovirus, Epstein Barr virus and varicella zoster infections.
XX
XX Claim 12; Page 36; 72pp; English.
XX
XX The sequences given in AAQ73325-81 represent oligonucleotides which
XX hybridise specifically with DNA or RNA from a herpes virus gene
XX corresponding to one of the open reading frames UL5, -8, -9, -20, -27-
XX 29, -30, -42, -52 or IB175 of herpes simplex virus type 1 (HSV-1). These
XX oligos pref. hybridise with a translation initiation site, a coding
XX region or a 5' untranslated region. These oligos may be used in
XX compositions for the treatment and diagnosis of herpes viral infection,
XX by contacting the virus or the animal, or its cells, tissues or body
XX fluids with the oligo. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ Sequence 20 BP; 0 A; 0 C; 12 G; 8 T; 0 U; 0 Other;
  Query Match      0.7%; Score 15.4; DB 1; Length 20;
  Best Local Similarity 94.1%; Pred. No. 1.5e+02;
  Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
  QY 1250 ACCCCATCCCAACCC 1266
  Db 19 ACCCCAAACCCCAACCC 3

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RESULT 178
AAQ61999/c
ID AAQ61999 standard; DNA; 20 BP.
XX
AC AAQ61999;
XX
XX 25-MAR-2003 (revised)
DT 04-NOV-1994 (first entry)
XX
XX Guanine quartet containing oligomer, #10.
DE
XX
XX Inhibition; replication; herpes simplex virus; HSV; HIV; retard;
KW human cytomegalovirus; influenza virus; inflammation; telomere length;
KW neurological disorders; phospholipase A2 activity; hyperproliferation;
KW malignancy; cardiovascular disease; snake bite; malignancy; aging; ss.
XX
OS Synthetic.
XX
XX Key Location/Qualifiers
FH misc_feature 1..20
FT /*tag= a
FT /*note= "Phosphorothionate intersugar linkages"
XX
XX WO9408053-A1.
XX
XX 14-APR-1994.
XX
XX 29-SEP-1993; 93WO-US009297.
XX
XX 29-SEP-1992; 92US-00954185.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Hanecak RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;
XX Ecker DJ, Vickers TA, Wyatt JR, Imbach JL;
XX WPI; 1994-135613/16.
XX
XX New modified oligo-nucleotide contg guanine quartet - inhibits activity
XX of viruses, e.g. HIV, and phospholipase A2 and modulates telomere length
XX of chromosomes.
XX
XX Claim 5; Page 19; 144pp; English.
XX
XX The sequences given in AAQ61825-50 and AAQ61886-906 are oligonucleotides
XX which contain a G4 or two G3 stretches and which may be used for
XX inhibiting replication of herpes simplex virus (HSV). Oligonucleotides
XX such as these may also be used for inhibiting activity of HIV, human
XX cytomegalovirus or influenza virus, or for treating inflammatory and
XX neurological disorders caused by phospholipase A2 activity in cases of
XX hyperproliferation, malignancy, cardiovascular disease and snake bite.
XX They may also be used for inhibiting division of malignant cells by
XX modulating telomere length, which may also retard aging. (Updated on 25-
XX MAR-2003 to correct PN field.)
XX
XX Sequence 20 BP; 0 A; 0 C; 12 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 15.4; DB 1; Length 20;
XX Best Local Similarity 94.1%; Pred. No. 1.5e+02;
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1250 ACCCCATCCCAACCCC 1266
DB 19 ACCCCCAACCCCAACCCC 3

RESULT 179
AAQ61896/c
ID AAQ61896 standard; DNA; 20 BP.
XX
XX AAQ61896;
XX
XX 25-MAR-2003 (revised)
DT 04-NOV-1994 (first entry)
XX
XX Guanine quartet containing oligomer, #6.
XX
XX Inhibition; replication; herpes simplex virus; HSV; HIV; retard;
KW human cytomegalovirus; influenza virus; inflammation; telomere length;
KW neurological disorders; phospholipase A2 activity; hyperproliferation;
XX
XX HSX replication inhibiting oligomer, ISIS no 5652.
XX
XX Inhibition; replication; herpes simplex virus; HSV; HIV;
KW human cytomegalovirus; influenza virus; inflammation;
KW neurological disorders; phospholipase A2 activity; hyperproliferation;
KW malignancy; cardiovascular disease; snake bite; malignancy;
KW telomere length; retard; aging; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
FH misc_feature 1..20
FT /*tag= a
FT /*note= "Phosphorothionate intersugar linkages"
XX
XX WO9408053-A1.
XX
XX 14-APR-1994.
XX
XX 29-SEP-1993; 93WO-US009297.
XX
XX 29-SEP-1992; 92US-00954185.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Hanecak RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;
XX Ecker DJ, Vickers TA, Wyatt JR, Imbach JL;
XX WPI; 1994-135613/16.
XX
XX New modified oligo-nucleotide contg guanine quartet - inhibits activity
XX of viruses, e.g. HIV, and phospholipase A2 and modulates telomere length
XX of chromosomes.
XX
XX Claim 5; Page 19; 144pp; English.
XX
XX The sequences given in AAQ61825-50 and AAQ61886-906 are oligonucleotides
XX which contain a G4 or two G3 stretches and which may be used for
XX inhibiting replication of herpes simplex virus (HSV). Oligonucleotides
XX such as these may also be used for inhibiting activity of HIV, human
XX cytomegalovirus or influenza virus, or for treating inflammatory and
XX neurological disorders caused by phospholipase A2 activity in cases of
XX hyperproliferation, malignancy, cardiovascular disease and snake bite.
XX They may also be used for inhibiting division of malignant cells by
XX modulating telomere length, which may also retard aging. (Updated on 25-
XX MAR-2003 to correct PN field.)
XX
XX Sequence 20 BP; 0 A; 0 C; 12 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 15.4; DB 1; Length 20;
XX Best Local Similarity 94.1%; Pred. No. 1.5e+02;
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1250 ACCCCATCCCAACCCC 1266
DB 19 ACCCCCAACCCCAACCCC 3

RESULT 180
AAQ61995/c
ID AAQ61995 standard; DNA; 20 BP.
XX
XX AAQ61995;
XX
XX 25-MAR-2003 (revised)
DT 04-NOV-1994 (first entry)
XX
XX Guanine quartet containing oligomer, #6.
XX
XX Inhibition; replication; herpes simplex virus; HSV; HIV; retard;
KW human cytomegalovirus; influenza virus; inflammation; telomere length;
KW neurological disorders; phospholipase A2 activity; hyperproliferation;

```



```

KW OS malignancy; cardiovascular disease; snake bite; malignancy; aging; ss.
XX OS Synthetic.
XX Key Location/Qualifiers
FH Key misc_feature 1..20
FT FT /*tag= a
FT FT /note= "Phosphorothionate intersugar linkages"
XX PN WO9408053-A1.
XX PD 14-APR-1994.
XX PF 29-SEP-1993; 93WO-US009297.
XX PR 29-SEP-1992; 92US-00954185.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Hanecak RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;
PI Ecker DJ, Vickers TA, Wyatt JR, Imbach JL;
XX DR WPI; 1994-135613/16.
XX XX
XX PT New modified oligo-nucleotide contg guanine quartet - inhibits activity
XX of viruses, e.g. HIV, and phospholipase A2 and modulates telomere length
XX of chromosomes.
XX PS Disclosure; Page 106; 144pp; English.
XX CC The sequences given in AAQ61990-2001 are oligonucleotides which contain
XX G4 or G3 stretches and which may be used for inhibiting replication of
XX herpes simplex virus (HSV), activity of HIV, human cytomegalovirus or
XX influenza virus, or for treating inflammatory and neurological disorders
XX caused by phospholipase A2 activity in cases of hyper-proliferation,
XX malignancy, cardiovascular disease and snake bite. Oligonucleotides such
XX as these, may be used for inhibiting division of malignant cells by
XX modulating telomere length, which may also retard aging. (Updated on 25-
XX MAR-2003 to correct PN field.)
XX SQ Sequence 20 BP; 0 A; 0 C; 12 G; 8 T; 0 U; 0 Other;

Query Match 0.7%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1.5e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1250 ACCCCATCCCAACCCC 1266
Db 19 ACCCCACCCCAACCCC 3

RESULT 181
AAQ61904/c
ID AAQ61904 standard; DNA; 20 BP.
XX AC AAQ61904;
XX XX
XX DT 25-MAR-2003 (revised)
XX DT 04-NOV-1994 (first entry)
XX DE HSV replication inhibiting oligomer, ISIS no 5650.
XX XX
XX KW Inhibition; replication; herpes simplex virus; HSV; HIV;
XX human cytomegalovirus; influenza virus; inflammation;
XX neurological disorders; phospholipase A2 activity; hyperproliferation;
XX malignancy; cardiovascular disease; snake bite; malignancy;
XX telomere length; retard; aging; ss.
XX OS Synthetic.
XX XX
XX FH Key Location/Qualifiers
FT FT misc_feature 1..20
FT FT /*tag= a

malignancy; cardiovascular disease; snake bite; malignancy; aging; ss.
XX OS Synthetic.
XX Key Location/Qualifiers
FH Key misc_feature 1..20
FT FT /*tag= a
FT FT /note= "Phosphorothionate intersugar linkages"
XX PN WO9408053-A1.
XX PD 14-APR-1994.
XX PF 29-SEP-1993; 93WO-US009297.
XX PR 29-SEP-1992; 92US-00954185.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Hanecak RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;
PI Ecker DJ, Vickers TA, Wyatt JR, Imbach JL;
XX DR WPI; 1994-135613/16.
XX XX
XX PT New modified oligo-nucleotide contg guanine quartet - inhibits activity
XX of viruses, e.g. HIV, and phospholipase A2 and modulates telomere length
XX of chromosomes.
XX PS Disclosure; Page 19; 144pp; English.
XX CC The sequences given in AAQ61825-50 and AAQ61886-906 are oligonucleotides
XX which contain a G4 or two G3 stretches and which may be used for
XX inhibiting replication of herpes simplex virus (HSV). Oligonucleotides
XX such as these may also be used for inhibiting activity of HIV, human
XX cytomegalovirus or influenza virus, or for treating inflammatory and
XX neurological disorders caused by phospholipase A2 activity in cases of
XX hyperproliferation, malignancy, cardiovascular disease and snake bite.
XX They may also be used for inhibiting division of malignant cells by
XX modulating telomere length, which may also retard aging. (Updated on 25-
XX MAR-2003 to correct PN field.)
XX SQ Sequence 20 BP; 0 A; 0 C; 12 G; 8 T; 0 U; 0 Other;

Query Match 0.7%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1.5e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1250 ACCCCATCCCAACCCC 1266
Db 19 ACCCCACCCCAACCCC 3

RESULT 182
AAQ97982/c
ID AAQ97982 standard; DNA; 20 BP.
XX AC AAQ97982;
XX XX
XX DT 25-MAR-2003 (revised)
XX DT 19-OCT-1995 (first entry)
XX DE Peptide nucleic acid oligomer targeting HIV gene.
XX XX
XX KW Peptide nucleic acid; PNA; HIV; human immunodeficiency virus; AIDS;
XX antiviral; antisense; triple helix; ss.
XX OS Synthetic.
XX XX
XX FH Key Location/Qualifiers
FT FT misc_feature 1..20
FT FT /*tag= a
FT FT /note= "at least one (and preferably all) of the backbone
FT subunits are composed of N-acetyl N-(2-aminoethyl)glycine
FT peptide residues, the nucleobase being attached
FT covalently to the acetyl group and the peptide linkage
FT being formed by condensation of the glycine carboxy group
FT of one residue with the amino group of the 2-aminoethyl
FT moiety in the next residue"
XX PN WO9504068-A1.

```

XX 09-FEB-1995.  
 XX  
 XX  
 XX 28-JUL-1994; 94WO-US008517.  
 XX  
 XX 29-JUL-1993; 93US-00099718.  
 XX  
 XX (ISTS-) ISIS PHARM INC.  
 XX  
 XX Becker DJ;  
 XX  
 XX WPI; 1995-082179/11.  
 XX  
 XX Oligomer hybridisable to HIV sequence and contg. peptide nucleic acid  
 PT sub:unit - binds in complementary manner to DNA and RNA, and useful for  
 PT modulating HIV viral activity, e.g. in treating AIDS.  
 XX  
 XX Claim 2; Page 176; 186pp; English.  
 XX  
 CC New peptide nucleic acid (PNA) oligomers are provided which (a) consist  
 CC of naturally occurring nucleobases covalently bound to a polyamide  
 CC backbone and (b) hybridise to the translation initiation AUG region, 5'  
 CC untranslated region (5' UTR), 3' untranslated region (3' UTR), splice  
 CC junctions or coding sequence of a human immunodeficiency virus gene  
 CC chosen from env, gag, pol, rev and tat. The PNAs can be used to target  
 CC RNA and single stranded DNA (ssDNA) to produce antisense-type gene  
 CC regulation moieties. They have utility as gene-targeted drugs for  
 CC modulating HIV processes. Hence they can be used to treat AIDS and other  
 CC viral infections. They are also useful in diagnostic applications and as  
 CC research tools. PNA oligomers have high affinity for complementary single  
 CC stranded DNA. They are also able to form triple helices in which a first  
 CC PNA strand binds with RNA or ssDNA and a second PNA strand binds with the  
 CC resulting double helix or with the first PNA strand. The PNAs possess no  
 CC significant charge and are water soluble, which facilitates cellular  
 CC uptake. Further, since they contain amides of non-biological amino acids,  
 CC they are biostable and resistant to enzymatic degradation by proteases.  
 CC The present sequence is a specifically claimed PNA sequence (represented  
 CC by the sequence of nucleobases) targeting HIV genes. (Updated on 25-MAR-  
 CC 2003 to correct PN field.)  
 XX  
 SQ Sequence 20 BP; 0 A; 0 C; 12 G; 8 T; 0 U; 0 Other;  
 Query Match 0.7%; Score 15.4; DB 1; Length 20;  
 Best Local Similarity 94.1%; Pred. No. 1.5e+02;  
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1250 ACCCATCCCCAACCCC 1266  
 Db 19 ACCCAACCCCAACCCC 3  
 RESULT 183  
 AAF56086/c  
 ID AAF56086 standard; DNA; 20 BP.  
 XX  
 AC AAF56086;  
 XX  
 DT 18-APR-2001 (first entry)  
 XX  
 DE HBV DNA polymerase gene PCR primer HBPr135B.  
 XX  
 KW HBV; hepatitis B virus; DNA polymerase gene; anti-HBV drug resistance;  
 KW mutation detection; PCR primer; ss.  
 XX  
 OS Hepatitis B virus.  
 XX  
 PN WO200104358-A2.  
 XX  
 PD 18-JAN-2001.  
 XX  
 PF 05-JUL-2000; 2000WO-EP006306.  
 XX  
 XX 08-JUL-1999; 99EP-00870148.  
 XX

PR 13-JUL-1999; 99US-0143546P.  
 XX  
 XX (INNO-) INNOGENETICS NV.  
 XX  
 PI Stuyver L, Maertens G, Van Geyt C;  
 XX  
 XX WPI; 2001-138370/14.  
 XX  
 PT Monitoring anti-HBV drug resistance by genetic detection of mutations in  
 PT DNA polymerase of HBV in patient's sample, involves hybridizing the  
 PT polynucleic acids of the sample with a probe and detecting the hybrid.  
 XX  
 XX Claim 4; Page 12; 64pp; English.  
 XX  
 CC The present sequence is a primer used in a method for monitoring anti-  
 CC hepatitis B virus (HBV) drug resistance in a patient by genetic detection  
 CC of any one of mutations L528M, M552V/I and/or V/L/M555I in HBV DNA  
 CC polymerase in a biological sample from the patient. The method is useful  
 CC in the field of genetic detection of anti-HBV drug resistance during HBV  
 CC therapy. The method is rapid, reliable and precise  
 XX  
 SQ Sequence 20 BP; 12 A; 2 C; 4 G; 2 T; 0 U; 0 Other;  
 Query Match 0.7%; Score 15.4; DB 1; Length 20;  
 Best Local Similarity 94.1%; Pred. No. 1.5e+02;  
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 907 ATTTCTTTGGTCTTTG 923  
 Db 17 ATTTCTTTGGTCTTTG 1  
 RESULT 184  
 ABQ92981  
 ID ABQ92981 standard; DNA; 20 BP.  
 XX  
 AC ABQ92981;  
 XX  
 DT 29-AUG-2003 (revised)  
 DT 21-OCT-2002 (first entry)  
 XX  
 DE T. tauschii/wheat D genome microsatellite cfd64 left PCR primer.  
 XX  
 KW Microsatellite marker; wheat; D genome; mapping; genotyping;  
 KW polymorphism; phenotypic trait; QTL; quantitative trait locus;  
 KW disease-associated gene; development factor; quality factor;  
 KW resistance factor; wheat product; identification; detection;  
 KW genetically modified wheat; PCR; primer; ss.  
 XX  
 OS Aegilops tauschii.  
 OS Triticum aestivum.  
 XX  
 PN EP1217079-A1.  
 XX  
 PD 26-JUN-2002.  
 XX  
 PF 22-DEC-2000; 2000EP-00403659.  
 XX  
 PR 22-DEC-2000; 2000EP-00403659.  
 XX  
 PA (INRG) INRA INST NAT RECH AGRONOMIQUE.  
 XX  
 PI Bernard M, Sourdille P, Guyomarch H;  
 XX  
 XX WPI; 2002-550410/59.  
 XX  
 PT Map of wheat D genome comprising the genome location of a microsatellite  
 PT marker, useful for e.g. identifying genes responsible for a desired  
 PT phenotypic trait, especially quantitative trait loci in wheat, and  
 PT diseases.  
 XX  
 XX Claim 4; Page 6; 105pp; English.  
 XX

CC The invention relates to a map of the bread wheat D genome comprising the  
 CC genome location of a microsatellite marker selected from a group of 185  
 CC such markers (ABQ92733-ABQ92917). The invention also encompasses the use  
 CC of left (ABQ92918-ABQ93102) and right (ABQ93103-ABQ93287) primers to  
 CC amplify and detect the microsatellite markers, and to identify genes  
 CC responsible for a phenotypic trait of interest in wheat. Wheat is an  
 CC allohexaploid species consisting of 3 diploid genomes designated A, B and  
 CC D, resulting from two successive intercrossings involving at least three  
 CC different species. The D genome is thought to have been introduced in the  
 CC most recent intercrossing, between the amphiploid AABB and triticum  
 CC tauschii (DD), probably involving only a limited number of genotypes of  
 CC both species. Due to its polyploid genome, the large size of its genome,  
 CC and its low level of polymorphism, the genetic mapping of wheat has to  
 CC date been difficult. Microsatellites are tandemly repeated sequences  
 CC between one and six nucleotides long, and are very polymorphic in length,  
 CC mainly due to polymerase slippage during replication. This high degree of  
 CC polymorphism makes them especially suitable for the genetic mapping of  
 CC species which show little intraspecific polymorphism, such as wheat. In  
 CC addition, microsatellites are codominant, and exhibit Mendelian  
 CC inheritance. The 185 microsatellite markers of the invention are  
 CC developed from the ancestral diploid donor species Triticum tauschii and  
 CC map to the wheat D genome, which is less polymorphic than the A or B  
 CC genomes. These microsatellite markers thus help to overcome some of the  
 CC problems associated with the genetic mapping of wheat. The wheat D genome  
 CC map and the microsatellite markers and associated primers of the  
 CC invention are useful for identifying genes responsible for a phenotypic  
 CC trait of interest, most notably QTLs (quantitative trait loci). In  
 CC particular they may be used for analysing genes and alleles implicated in  
 CC disease and for identifying development factors, quality factors and  
 CC factors conferring resistance to pathogens and xenobiotics. The  
 CC microsatellite markers, and associated primers may be also be used in  
 CC mapping and genotyping diploid and polyploid species of Triticum,  
 CC particularly Aegilops, Triticum monococcum, Triticum durum, Triticum  
 CC aestivum, or related species; for identifying cultivars and hybrids of  
 CC Triticum and related species; to assess whether or not a product  
 CC comprises wheat or a related species; and to assess whether or not a  
 CC product comprises genetically modified wheat. The present sequence  
 CC represents a specifically claimed Triticum tauschii/wheat genome D  
 CC microsatellite marker left PCR primer of the invention. (Updated on 29-  
 CC AUG-2003 to standardise OS field)

XX Sequence 20 BP; 2 A; 6 C; 4 G; 8 T; 0 U; 0 Other;  
 SQ Query Match 0.7%; Score 15.4; DB 1; Length 20;  
 Best Local Similarity 94.1%; Pred. No. 1.5e+02;  
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 886 ACAGTGTGTGTCCTT 902  
 ||||| ||||| ||||| |||||  
 Db 1 ACAGTGTGTGTCCTT 17

RESULT 185  
 AAZ56188  
 ID AAZ56188 standard; DNA; 20 BP.  
 AC AAZ56188;  
 XX

DT 28-MAR-2000 (first entry)

DE Antisense oligonucleotide A1.3 for IL-13 alpha' receptor inhibition.  
 DE Interleukin-13; IL-13; antisense oligonucleotide; asthma; allergy;  
 KW receptor expression inhibitor; immunoglobulin E; IgE; inflammation;  
 KW hyperosinophilia; alpha' chain; ss.  
 XX Homo sapiens.

OS  
 XX WO9966037-A2.  
 FN  
 XX 23-DEC-1999.  
 PD  
 XX 17-JUN-1999; 99WO-CA000572.

XX 17-JUN-1998; 98CA-02235420.  
 PR  
 XX (REEX-) RECH EXPERTISES & DEV MEDICAUX PARENZ IN.  
 PA  
 XX Renzi P;  
 PI  
 XX WPI; 2000-097743/08.  
 DR

XX Antisense oligonucleotides directed to CCR3, interleukin or granulocyte  
 PT macrophage colony stimulating factor receptors, used for treating or  
 PT preventing asthma, allergies, hyperosinophilia, inflammation or cancer.  
 XX Claim 5; Page 18; 72pp; English.

XX This is an antisense oligonucleotide directed against the interleukin-13  
 CC (IL-13) receptor alpha' chain, for inhibiting receptor expression. IL-13  
 CC is involved in immunoglobulin E (IgE) production, the development and  
 CC persistence of asthma and atopy. The invention relates to antisense  
 CC oligonucleotides directed against a nucleic acid sequence encoding either  
 CC a chemokine receptor (CCR3), a common subunit of interleukin-4 (IL-4) and  
 CC interleukin-13 (IL-13) receptors, or a common subunit of interleukin-3  
 CC (IL-3), interleukin-5 (IL-5) and granulocyte macrophage colony  
 CC stimulating factor (GM-CSF) receptors. The antisense oligonucleotides can  
 CC be used in the treatment or prevention of asthma, allergy,  
 CC hyperosinophilia, general inflammation or cancer

XX Sequence 20 BP; 4 A; 11 C; 5 G; 0 T; 0 U; 0 Other;  
 SQ Query Match 0.7%; Score 15.2; DB 1; Length 20;  
 Best Local Similarity 85.0%; Pred. No. 1.6e+02;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1287 CGCCCAAGCCACAGAGCC 1306  
 ||||| ||||| ||||| |||||  
 Db 1 CGCCCAAGCCACAGAGCC 20

RESULT 186  
 ABS55159  
 ID ABS55159 standard; DNA; 20 BP.

AC ABS55159;

DT 10-DEC-2002 (first entry)

XX Cow calpastatin (CAST) D/E allele probe LOX K6.

DE Meat tenderness; animal; calpastatin; lysyl oxidase; breeding animal;  
 KW unpedigreed animal; feed lot entry; genetic marker; calpain; probe; ss;  
 KW post-mortem proteolysis; collagen fibrillogenesis; cow; CAST; D/E allele.

OS Bos sp.

XX WO200264820-A1.

XX 22-AUG-2002.

XX 08-FEB-2002; 2002WO-AU000122.

XX 09-FEB-2001; 2001AU-00002975.

XX (CSIR ) COMMONWEALTH SCI & IND RES ORG.  
 PA (QUEE-) STATE QUEENSLAND DEPT PRIMARY IND.  
 PA (UYNE-) UNIV NEW ENGLAND.  
 PA (NEWS-) NEW SOUTH WALES DEPT AGRIC.  
 PA (MEAT-) MEAT & LIVESTOCK AUSTRALIA LTD.

XX Barendse WJ;

XX WPI; 2002-723174/78.

XX Assessing meat tenderness useful for selecting breeding animals and

PT unpedigreed animals for entry into feed lots comprises testing the animal  
 PT for the presence or absence of genetic markers associated with  
 PT calpastatin or lysyl oxidase.

XX Claim 33; Page 70; 8pp; English.

XX The present invention relates to a new method for assessing the  
 CC tenderness of meat from an animal. The method involves testing the  
 CC for the presence or absence of a genetic marker, which is an allele of  
 CC the gene encoding calpastatin or lysyl oxidase, respectively. The method  
 CC is useful for selecting breeding animals and unpedigreed animals for  
 CC entry into feed lots. The meat obtained from the selected animal is  
 CC useful for breeding. The genetic markers are useful for assessing meat  
 CC tenderness. The genetic markers are associated with calpastatin or lysyl  
 CC oxidase. Calpastatin inhibits calpain activity and is assumed have a role  
 CC in meat tenderness through the regulation of post-mortem proteolysis.  
 CC Lysyl oxidase initiates cross-link formation at an early stage in  
 CC collagen fibrillogenesis. The present nucleic acid sequence represents a  
 CC cow calpastatin (CAST) D/E allele probe of the invention  
 XX

SQ Sequence 20 BP; 7 A; 6 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.7%; Score 15.2; DB 1; Length 20;  
 Best Local Similarity 85.0%; Pred. No. 1.6e+02;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 875 ACTCAGGCACCAAGTCTG 894  
 |||||  
 1 ACTCAGGCACCAATAGCTG 20

RESULT 187

ID ABX12684 standard; DNA; 20 BP.

AC ABX12684;

DT 10-MAY-2003 (first entry)

DE Human IL-4/IL-13 receptor DNA, antisense oligonucleotide #4.

XX Human; inflammation; 2',6'-diaminopurine; DAP; antisense therapy;  
 KW DAP-modified oligonucleotide; pulmonary disease; respiratory disease;  
 KW neurological disease; cardiovascular disease; rheumatological disease;  
 KW digestive disease; cutaneous disease; ophthalmological disease;  
 KW urinary system disease; pathogen infection; genetic disease; cancer;  
 KW airway; nose; pulmonary fibrosis; adult respiratory distress syndrome;  
 KW cystic fibrosis; chronic obstructive lung disease; chronic bronchitis;  
 KW eosinophilic bronchitis; asthma; allergy; allergic rhinitis; sinusitis;  
 KW hyperesinophilia; cardiant; ophthalmological; cytostatic; antiasthmatic;  
 KW antiallergic; antiinflammatory; immunosuppressive; atopic disease;  
 KW neoplastic cell proliferation; antisense; IL-4; IL-13;  
 KW interleukin-4 receptor; interleukin-13 receptor; ss.

OS Homo sapiens.

PN WO2003004511-A2.

PD 16-JAN-2003.

PF 08-JUL-2002; 2002WO-CA001046.

PR 06-JUL-2001; 2001US-0303071P.

PA (TOPI-) TOPIGEN PHARM INC.

PI Renzi P, Allam M, Allakhverdi Z;

DR WPI; 2003-247944/24.

XX Increasing in vivo efficacy of a nucleic acid molecule that is  
 PT administered to a mammal for inhibiting inflammation in mammals, involves  
 PT incorporating into the nucleic acid molecule at least one nucleotide

PT substitute.

XX Claim 28; Page 11; 63pp; English.

XX The present invention relates to a method for increasing the in vivo  
 CC efficacy of oligonucleotides and inhibiting inflammation. The  
 CC oligonucleotides comprise at least one nucleotide substitute of 2',6'-  
 CC diaminopurine (DAP) and/or its analogue. The DAP nucleotide substitutions  
 CC are useful for increasing in vivo efficacy of a nucleic acid molecule  
 CC that is administered to a mammal. The DAP-modified oligonucleotides are  
 CC useful in antisense therapy for treating and/or preventing  
 CC pulmonary/respiratory diseases, neurological diseases, cardiovascular  
 CC diseases, rheumatological diseases, digestive diseases, cutaneous  
 CC infections, ophthalmological diseases, urinary system diseases, pathogen  
 CC respiratory system disease is a sickness associated with an inflammation  
 CC of the lungs, the airways and/or the nose. The respiratory system disease  
 CC is selected from pulmonary fibrosis, adult respiratory distress syndrome,  
 CC cystic fibrosis, chronic obstructive lung disease, chronic bronchitis,  
 CC eosinophilic bronchitis, asthma, allergy, allergic rhinitis, sinusitis  
 CC and hyperesinophilia. The DAP-modified oligonucleotides are more stable  
 CC in the body, more effective, and less toxic than standard antisense  
 CC oligonucleotides. DAP or its analogues are more effective than other  
 CC substitutes of adenosine. ABX12681-ABX12698 represent antisense  
 CC oligonucleotides for treating or preventing atopic diseases and  
 CC neoplastic cell proliferation

SQ Sequence 20 BP; 4 A; 11 C; 5 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 1.6e+02;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1287 CGCCCAAGCCACAGACC 1306

|||  
 1 CGCCCAAGCCCGCAGAGCC 20

RESULT 198

ADBS97971/c

ID ADBS97971 standard; DNA; 20 BP.

AC ADBS97971;

DT 04-DEC-2003 (first entry)

DE Human K-Ras codon 12 probe SEQ ID NO:55.

XX Kinetic detection; nucleic acid; hybridisation; high speed detection;  
 KW human; K-Ras; probe; ss.

OS Homo sapiens.

PN WO2003062418-A1.

PD 31-JUL-2003.

PF 24-JAN-2003; 2003WO-JP000668.

PR 25-JAN-2002; 2002JP-00017272.

PR 27-AUG-2002; 2002JP-00247023.

PA (OLYU) OLYMPUS OPTICAL CO LTD.

PI Koike H, Nagaoka T, Satoh T, Kaneko Y, Hatanaka M, Fukuoka M;  
 PI Sakamoto H, Yonekawa H;

DR WPI; 2003-608193/57.

XX Detecting nucleic acid data for rapid analysis.

XX Example 4; Page 57; 67pp; Japanese.

CC The invention relates to a method for kinetically detecting nucleic acid  
 CC data. The method comprises allowing a target nucleic acid and a probe to  
 CC bind and form a hybrid, and then detecting for it by kinetic collection  
 CC of the signal data. The invention also encompasses a device for detecting  
 CC nucleic acid data. The method of the invention provides for the high  
 CC speed detection of nucleic acid data, and is capable of detecting a  
 CC single base difference between nucleic acid sequences. The present  
 CC sequence represents a human K-Ras codon 12 probe used in an example of  
 CC the invention.

SQ Sequence 20 BP; 2 A; 2 C; 12 G; 4 T; 0 U; 0 Other;  
 Query Match 0.7%; Score 15.2; DB 1; Length 20;  
 Best Local Similarity 85.0%; Pred. No. 1.6e+02;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1130 CCTTCACCTCCAGCTCCACC 1149  
 |||||  
 Db 20 CCTACGCCACCAGCTCCACC 1

RESULT 189  
 AAZ74370/C  
 ID AAZ74370 standard; DNA; 21 BP.

XX AC AAZ74370;

XX DT 10-SEP-2001 (first entry)

XX DE Human biallelic marker downstream amplification primer SEQ ID NO:8726.

XX KW Human genome; biallelic marker; high density disequilibrium map;  
 KW genomic map; haplotype; phenotype; polymorphic base; genotyping;  
 KW haplotyping; hybridisation; identification; characterisation;  
 KW amplification; single nucleotide polymorphism; SNP; PCR primer;  
 KW diagnosis; ss.

XX OS Homo sapiens.

XX PN WO9954500-A2.

XX PD 28-OCT-1999.

XX PF 21-APR-1999; 99WO-IB000822.

XX PR 21-APR-1998; 98US-0082614P.

XX PR 23-NOV-1998; 98US-0109732P.

XX FA (GEST ) GENSET.

XX XX Cohen D, Blumenfeld M, Chumakov I;

XX XX WPI; 2000-013267/01.

XX PT Novel biallelic markers used to construct a high density disequilibrium  
 XX map of the human genome.

XX PS Claim 8; Page 2091; 2745pp; English.

XX CC AAZ65654 to AAZ69578 represent human biallelic markers from the present  
 CC invention, which contain a polymorphic base at position 24 of their  
 CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification  
 CC primers for the biallelic markers. The biallelic markers of the invention  
 CC have a variety of uses: they can be used for high density mapping of the  
 CC human genome, and in complex association studies and haplotyping studies  
 CC which are useful in determining the genetic basis for disease states.  
 CC Compositions and methods of the invention can also be useful for the  
 CC identification of the targets for the development of pharmaceutical  
 CC agents and diagnostic methods, as well as the characterisation of the  
 CC differential efficacious responses to and side effects from  
 CC pharmaceutical agents acting on a disease as well as other treatment.  
 CC N.B. the SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and  
 CC 3367, are not actually given a sequence in the Sequence Listing from the

CC present invention

XX SQ Sequence 21 BP; 6 A; 4 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.7%; Score 15.2; DB 1; Length 21;

Best Local Similarity 85.0%; Pred. No. 1.9e+02;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 766 GGTTCTCTTCTAAGAGAAA 785

|||||

Db 21 GGTTCTCTCTAATAGAAA 2

RESULT 190

ABS98379/C

ID ABS98379 standard; DNA; 21 BP.

XX AC ABS98379;

XX DT 23-DEC-2002 (first entry)

XX DE Human multidrug resistance associated protein 3 polymorphic sequence #1.

XX KW Human; ds; cytochrome P450 A1; CYP4501A1; UGT2B4; MDR1;

XX KW cytochrome P450 A2; CYP4501A2; cytochrome P450 02E; CYP45002E1; LTF;

XX KW adrenergic receptor beta1; ADRB1; aryl hydrocarbon; AHR; MRE3; NR1I2;

XX KW aryl hydrocarbon receptor nuclear translocator; ARNT; cathepsin S; CTSS;

XX KW cyclooxgenase 2; COX2; diazepam binding inhibitor; DBI; haematological;

XX KW epoxide hydrolase 2; EPHX2; 5-lipoxygenase activating protein; FLAP;

XX KW glutathione-S-transferase 12; GST12; histamine-N-methyl transferase;

XX KW HNMT; kallikrein 2; KLK2; nicotinamide-N-methyl transferase; NNMT;

XX KW NADPH quinone oxidoreductase 2; NQO2; sulfoltransferase thermolabile; STM;

XX KW UDP-glucuronosyl transferase 2B4; UDP-glucuronosyl transferase 2B7;

XX KW UGT2B7; UDP-glucuronosyl transferase; UGT2B15; urokinase receptor; uPA;

XX KW multidrug resistance 1; lactotransferrin; orphan nuclear receptor;

XX KW multidrug resistance associated protein 3; cancer; prostate;

XX KW acetylcholine muscarinic receptor; CHMR1; CHMR2; CHMR3; CHMR4; CHMR5;

XX KW altered drug metabolism; cardiovascular function; colorectal tumour;

XX KW central nervous system; pulmonary; immunological; SNP;

XX KW single nucleotide polymorphism.

XX OS Homo sapiens.

XX PN WO200257410-A2.

XX PD 25-JUL-2002.

XX PF 28-NOV-2001; 2001WO-US044838.

XX PR 28-NOV-2000; 2000US-00724389.

XX FA (DNAS-) DNA SCI LAB INC.

XX XX Guida M, Hall J;

XX XX WPI; 2002-698522/75.

XX PT Isolated nucleic acid molecules having polymorphisms in known human genes  
 XX e.g. cytochrome P450 and cathepsin S useful as genetic linkage markers  
 XX for locating, identifying and characterizing the genes responsible for  
 XX disorder-related traits.

XX PS Example 24; Page 152; 714pp; English.

XX CC This invention relates to the sequence of an isolated nucleic acid  
 CC molecule comprising at least one base variation from that of a known  
 CC human cytochrome P450 A1 (CYP4501A1), cytochrome P450 A2 (CYP4501A2),  
 CC cytochrome P450 02E1 (CYP45002E1), adrenergic receptor beta1 (ADBR1),  
 CC aryl hydrocarbon (AHR), aryl hydrocarbon receptor nuclear translocator  
 CC (ARNT), cathepsin S (CTSS), cyclooxgenase 2 (COX2), diazepam binding  
 CC inhibitor (DBI), epoxide hydrolase 2 (EPHX2), 5-lipoxygenase activating  
 CC protein (FLAP), glutathione-S-transferase 12 (GST12), histamine-N-methyl  
 CC transferase (HNMT), (kallikrein 2) KLK2, nicotinamide -N-methyl



CC receptor 1 (TNFR1), where the antisense compound inhibits expression of  
 CC TNFR1. The antisense compound is useful for inhibiting the expression of  
 CC TNFR1 in cells or tissues. The antisense compound is also useful for  
 CC treating an animal (preferably human) having a disease or condition  
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver  
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting  
 CC the expression of TNFR1. The antisense compound is useful for  
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.  
 CC This polynucleotide sequence represents a human oligonucleotide relating  
 CC to the TNFR1 of the invention

XX SQ Sequence 18 BP; 5 A; 2 C; 9 G; 2 T; 0 U; 0 Other;

Query Match 0.7%; Score 15; DB 1; Length 18;

Best Local Similarity 100.0%; Pred. No. 1.3e+02;

Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1130 CCTTCACTCCAGCT 1144

Db 15 CCTTCACTCCAGCT 1

# RESULT 193

AAV10706/C

ID AAV10706 standard; DNA; 19 BP.

XX AC AAV10706;

XX AC AAV10706;

XX AC AAV10706;

DT 21-JUL-1998 (first entry)

XX 21-JUL-1998 (first entry)

DE Human breast cancer gene CHL-9a11-2 primer pchl-t7-5f.

XX Breast cancer; malignant transformation; diagnostic; therapeutic;

KW screening; primer; ss.

XX Synthetic.

OS Homo sapiens.

XX Homo sapiens.

XX WO9738085-A2.

PN 16-OCT-1997.

PD 16-OCT-1997.

XX 09-APR-1997; 97WO-US005930.

XX 10-APR-1996; 96US-0015167P.

PR 05-JUN-1996; 96WO-US009286.

PR 06-JUN-1996; 96US-0019202P.

PR 11-JUL-1996; 96US-00678280.

XX (CALP-) CALIFORNIA PACIFIC MEDICAL CENT RES INST.

PA Smith H, Chen L;

PI WPI; 1997-512705/47.

DR Breast cancer genes - used to develop products to design or screen

XX diagnostic reagents or therapeutic compounds.

PT Disclosure; Fig 7; 118pp; English.

XX AAV10702-V10719 are primers used in a method to identify the novel human

CC breast cancer gene CHL-9a11-2 by differential display. The identified

CC genes or fragments of these genes can be used for identifying genes and

CC gene products that are intimately related to malignant transformation or

CC maintenance of the malignant properties of cancer cells. It can also be

CC used to design or screen diagnostic reagents or therapeutic compounds.

CC Kits are included within the scope of the invention

XX SQ Sequence 19 BP; 7 A; 2 C; 8 G; 1 T; 0 U; 1 Other;

Query Match 0.7%; Score 15; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 1.6e+02;

Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 928 TTATCCCTCCTCTTC 942

Db 18 TTATCCCTCCTCTTC 4

# RESULT 194

AAV14301/C

ID AAV14301 standard; DNA; 20 BP.

XX AC AAV14301;

XX AC AAV14301;

XX AC AAV14301;

DT 27-AUG-2003 (revised)

DT 19-MAY-1998 (first entry)

XX 19-MAY-1998 (first entry)

DE Probe HBP135 for Hepatitis b virus.

XX Probe; hepatitis b virus; HBV detection; RT pol region; genetic analysis;

KW preCore region; HBsAg region; genotype specific target;

KW mutation detection; ss.

XX Synthetic.

OS Hepatitis B virus.

XX WO9740193-A2.

PN 30-OCT-1997.

XX 21-APR-1997; 97WO-EP002002.

XX 19-APR-1996; 96EP-00870053.

XX (INNO-) INNOGENETICS NV.

PA Stuyver L, Rossau R, Maertens G;

PI WPI; 1997-535867/49.

DR Detection and/or genetic analysis of hepatitis B virus - specifically

XX genotype, preCore mutations, vaccine escape mutations and RT gene

XX mutations selected by treatment with drugs.

XX Example 1; Page 29; 80pp; English.

XX This sequence represents a probe for hepatitis b virus (HBV), used in the

CC method of the invention for detection and/or genetic analysis of

CC hepatitis B virus (HBV) in a sample. The method comprises: (a) optionally

CC releasing, isolating or concentrating polynucleic acids (I) in the

CC sample, and amplifying the relevant part of a suitable HBV gene in the

CC sample with at least 1 suitable primer pair; (b) hybridising (I) with a

CC combination of at least 2 nucleotide probes, which are applied to known

CC locations on a solid support and hybridise specifically to mutant target

CC sequences chosen from the HBV RT pol gene region, HBV preCore region,

CC HBsAg region and/or HBV genotype specific target sequences, or their

CC complements or U for T homologues; (c) detecting the hybrids formed in

CC step (b), and inferring the HBV genotype and/or mutants present in the

CC sample from the differential hybridisation signal(s). The composition can

CC be used to diagnose and/or monitor HBV mutants and/or genotypes in a

CC sample, specifically genotype, preCore mutations, vaccine escape

CC mutations and RT gene mutations selected by treatment with drugs, e.g.

CC lamivudine and penciclovir. (Updated on 27-AUG-2003 to correct OS field.)

XX SQ Sequence 20 BP; 11 A; 2 C; 4 G; 2 T; 0 U; 1 Other;

Query Match 0.7%; Score 15; DB 1; Length 20;

Best Local Similarity 88.2%; Pred. No. 1.9e+02;

Matches 15; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 907 ATTTCTTTGCTCTTG 923

Db 17 ATTTCTTTGCTCTTG 1

```

RESULT 195
AAAD09117/c
ID AAD09117 standard; DNA; 20 BP.
XX
XX AC AAD09117;
XX
XX DT 04-SEP-2001 (first entry)
XX
XX DE Hepatitis B virus genotype G DNA amplifying primer HBPr135.
XX
XX KW HBV genotype G; preCore; HBpol; polymerase; envelope protein; preS1;
KW preS2; surface antigen; HBsAg; HBx protein; vaccine; liver disease;
KW hepatitis; liver cancer; HBeAg; core antigen; PCR primer; ss.
XX
XX OS Hepatitis B virus.
XX
XX PN WO200138498-A2.
XX
XX PD 31-MAY-2001.
XX
XX PF 21-NOV-2000; 2000WO-US032108.
XX
XX PR 24-NOV-1999; 99US-0167206P.
XX
XX (PHAR-) PHARMASSET INC.
XX
XX FA (INNO-) INNOGENETICS NV.
XX
XX STuyver L, Schinazi R, De Gendt S, Van Geyt C, Zoulim F, Fried M,
PI Rossau R;
XX
XX WPI; 2001-367676/38.
XX
XX Novel hepatitis B virus genotype G, nucleic acids encoding virus,
PT polypeptides encoded by nucleic acids, useful for preparing vaccine to
PT treat or prevent the hepatitis B virus genotype G infection in a subject.
XX
XX Example; Page 39; 84pp; English.
XX
XX The present invention relates to hepatitis B virus (HBV) strain FRI,
CC genotype G DNA encoding PreCore/Core protein, HBpol, envelope (PreS1,
CC PreS2 and surface antigen HBsAg) and HBx proteins. HBV genotype G nucleic
CC acids and polypeptides are useful for diagnosing, prognosing and treating
CC infections caused by HBV genotype G. They can be used in a vaccine to
CC treat or prevent HBV genotype G infection. The HBV genotype G derived
CC nucleic acids and antibodies are useful for detecting HBV genotype G in a
CC sample or diagnosis of HBV genotype G infection. The presence of HBV
CC genotype G statistically correlates with the presence of liver damage
CC and/or liver cancer in the subject. The HBV genotype G core insert
CC peptide encoding nucleic acid is useful for designing monitoring assays
CC to study and predict the evolution of anti-HBe and anti-HBc antibodies
CC and HBeAg (genotype G e antigen) in patients infected with HBV. The
CC antibodies or antigens of HBV genotype G are useful for identifying a
CC stage of liver disease caused by HBV genotype G. The present sequence is
CC a PCR primer used to amplify hepatitis B virus (HBV) genotype G DNA
XX fragment
XX
XX Sequence 20 BP; 11 A; 2 C; 4 G; 2 T; 0 U; 1 Other;
XX
XX Query Match 0.7%; Score 15; DB 1; Length 20;
XX Best Local Similarity 88.2%; Pred. No. 1.9e+02;
XX Matches 15; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 907 ATTTCTTTGCTCTTTG 923
XX ||||| ||||| |||||
XX 17 ATTTCTTTGCTCTTG 1
XX
XX Db
XX
XX RESULT 196
XX AAH77555/c
XX ID AAH77555 standard; DNA; 20 BP.
XX
XX AC AAH77555;
XX
XX XX

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DT 19-OCT-2001 (first entry)
XX
XX DE HBV HBPol/HBsAg region antisense primer HBPr 135.
XX
XX KW Hepatitis B virus; HBV; preCore; Core; preS1; preS2; HBs; HBx; HBPol;
KW HBsAg; antiviral; vaccine; genotype G; genotyping; HBeAg; HBeAg;
KW PCR primer; ss.
XX
XX OS Hepatitis B virus.
XX
XX PN WO200140279-A2.
XX
XX PD 07-JUN-2001.
XX
XX PF 20-NOV-2000; 2000WO-EP011526.
XX
XX PR 03-DEC-1999; 99EP-00870252.
XX
XX PR 07-DEC-1999; 99US-0169287P.
XX
XX (INNO-) INNOGENETICS NV.
XX
XX STuyver L, Van Geyt C, De Gendt S;
XX WPI; 2001-374785/39.
XX
XX Novel isolated and/or purified hepatitis B virus polypeptide and
PT polynucleotide sequences that are phylogenetically different from HBV
PT genotype A-F molecules, useful for HBV diagnosis, prophylaxis and
PT therapy.
XX
XX Example 1; Page 10; 94pp; English.
XX
XX The invention relates to the complete nucleic acid sequence of a new
CC human hepatitis B virus (HBV) genotype, provisionally named genotype G.
CC This genotype was found with a high prevalence in patients chronically
CC infected with HBV and residing in Europe and the USA. The invention
CC relates to a fully defined sequence of 3248 nucleotides as given in
CC specification, a sequence with 92% identity to the given sequence, or
CC sequence that is degenerate to the mentioned sequences. These
CC polynucleotides are useful for HBV genotyping. The proteins encoded by
CC the polynucleotides are useful for detecting antibodies in a biological
CC sample. Ligands that bind to the proteins and antibodies directed against
CC the proteins are useful for detecting the proteins and for detecting
CC HBeAg and HBeAg (precore precursor proteins). They are also useful for
CC preparing a vaccine or medication for treating HBV infections. The
CC present sequence is one of a number of primers used to amplify HBV DNA in
CC examples demonstrating HBV genotyping and the detection of HBV genotype G
XX
XX Sequence 20 BP; 11 A; 2 C; 4 G; 2 T; 0 U; 1 Other;
XX
XX Query Match 0.7%; Score 15; DB 1; Length 20;
XX Best Local Similarity 88.2%; Pred. No. 1.9e+02;
XX Matches 15; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 907 ATTTCTTTGCTCTTTG 923
XX ||||| ||||| |||||
XX 17 ATTTCTTTGCTCTTG 1
XX
XX Db
XX
XX RESULT 197
XX AAT90589/c
XX ID AAT90589 standard; DNA; 18 BP.
XX
XX AC AAT90589;
XX
XX DT 07-APR-1998 (first entry)
XX
XX 5' PCR primer for the HCV 5' UTR and capsid region.
XX
XX Recognition sequence; HCV; ribozyme; 5' untranslated region;
KW nucleocapsid coding region; hairpin ribozyme; RNA cleavage; treatment;
KW HCV infection; HCV contamination; PCR primer; ss.
XX
XX

```





PT gene expression of a Hepatitis C Virus (HCV), useful for treating or  
 PT preventing HCV infection.

XX Example 5; Col 15; 48pp; English.

XX The invention relates to a new ribozyme with the ability to inhibit  
 CC replication, infectivity or gene expression of a Hepatitis C Virus (HCV)  
 CC by cleaving the positive strand genomic RNA of HCV at a sequence having  
 CC 16 bp. Also included are a nucleic acid encoding the ribozyme, a host  
 CC cell containing the ribozyme or vector, a vector comprising a promoter  
 CC operably linked to the nucleic acid, producing a ribozyme, interfering  
 CC with HCV replication or gene expression in a cell infected in a cell  
 CC culture with HCV or a composition comprising the ribozyme and a carrier  
 CC or diluent. The ribozyme is useful for treating or preventing HCV  
 CC infection. The present sequence is a reverse transcriptase (RT)-PCR  
 CC primer used to amplify HCV coding regions for cloning into expression  
 CC vectors

SQ Sequence 18 BP; 2 A; 7 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.8; DB 1; Length 18;

Best Local Similarity 88.9%; Pred. No. 1.5e+02; Indels 0; Gaps 0;  
 Matches 16; Conservative 0; Mismatches 2;

Qy 1204 CCCATCAGGGGGCTGAC 1221

Db 18 CCCATCAGGGGGCTGGC 1

RESULT 200

AAA66673

ID AAA66673 standard; DNA; 19 BP.

XX AAA66673;

XX 09-OCT-2000 (first entry)

DE Dog genomic marker oligonucleotide sequence SEQ ID NO:535.

KW Dog; genome; genomic marker; radiation hybrid map; identification;  
 KW chromosome location; gene marker; polymorphic microsatellite marker;  
 KW phenotype; behaviour; pedigree; ss.

XX Canis familiaris.

OS WO200029615-A2.

XX 25-MAY-2000.

XX 15-NOV-1999; 99WO-IB001907.

XX 13-NOV-1998; 98US-0108193P.

XX (CNRS ) CNRS CENT NAT RECH SCI.

XX Galibert F, Andre C;

XX WPI; 2000-387821/33.

XX New radiation hybrid map of the dog, Canine familiaris, genome, useful  
 PT for e.g. identifying genes implicated in phenotypic and behavioral traits  
 PT or in genetic diseases and for studying dog pedigrees.

XX Claim 1; Page 76; 87pp; English.

XX The present invention describes a radiation hybrid map of the dog (Canine  
 CC familiaris) genome comprising the genome location of a marker selected  
 CC from AAA66139 to AAA66942. The radiation hybrid map is useful for  
 CC identifying and localising dog genes, since it covers approximately 80 %  
 CC of the dog genome and provides a dense map integrating different types  
 CC (i.e. Type I and Type II) of markers. The map and the dog genome markers  
 CC (or complementary sequences) are especially useful to identify genes  
 CC responsible for phenotypic and behavioural traits in dogs, to identify

CC morbid genes, to analyse diseases and identify implicated genes in such  
 CC diseases and their alleles, and to study dog pedigrees. They may also be  
 CC useful for isolating corresponding human gene sequences e.g. genes  
 CC involved in genetic diseases

SQ Sequence 19 BP; 4 A; 8 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.8; DB 1; Length 19;

Best Local Similarity 88.9%; Pred. No. 1.8e+02; Indels 0; Gaps 0;  
 Matches 16; Conservative 0; Mismatches 2;

Qy 1075 AGTCCCACTCCAGGCTTC 1092

Db 1 AGTCCCACTCCAGGCTTC 18

RESULT 201

ACA98830/C

ID ACA98830 standard; DNA; 19 BP.

XX ACA98830;

XX 28-JUL-2003 (first entry)

DE Human CYP2C8 SNP detection PCR primer #270.

KW Cytochrome P450 polypeptide 2C8; CYP2C8; arachidonic acid metabolism;  
 KW cancer; cardiovascular disease; cytostatic; cardiovascular; gene therapy;  
 KW single nucleotide polymorphism detection; SNP detection; PCR; primer; ss.

XX Homo sapiens.

OS WO200299099-A2.

XX 12-DEC-2002.

XX 31-MAY-2002; 2002WO-EP006000.

XX 01-JUN-2001; 2001EP-00112899.

XX (EPID-) EPIDAUROS BIOLOGIE AG.

XX Penger A, Sprenger R, Brinkmann U;

XX WPI; 2003-167344/16.

XX New polymorphic variants of the gene encoding Cytochrome P450 polypeptide  
 PT 2C8 (CYP2C8), useful for diagnosing or treating a disease, e.g.  
 PT arachidonic acid metabolism, cancer or cardiovascular diseases.

XX Claim 1; Page 53; 178pp; English.

XX The invention describes a new polynucleotide comprises a polynucleotide:  
 CC (a) having any of 101 nucleic acid sequences with 18-19 bp fully defined  
 CC in the specification; (b) encoding any of seven polypeptides having 7  
 CC amino acids, or a polypeptide with 3 amino acids; (c) capable of  
 CC hybridising to a Cytochrome P450 polypeptide 2C8 (CYP2C8) gene; (d)  
 CC encoding a molecular CYP2C8 variant polypeptide or its fragment. The  
 CC polynucleotide, gene, vector, polypeptide or antibody is useful for  
 CC diagnosing or treating a disease, for preparing a diagnostic composition  
 CC for diagnosing a disease, or for preparing a pharmaceutical composition  
 CC for treating a disease. This disease includes arachidonic acid  
 CC metabolism, cancer or cardiovascular diseases. This sequence represents a  
 CC primer used to isolate regions of the human cytochrome P450 polypeptide  
 CC 2C8 gene (CYP2C8) in order to identify the single nucleotide polymorphism  
 CC (SNP) in that region of different individuals useful in disease diagnosis

SQ Sequence 19 BP; 7 A; 3 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.8; DB 1; Length 19;

Best Local Similarity 88.9%; Pred. No. 1.8e+02; Indels 0; Gaps 0;  
 Matches 16; Conservative 0; Mismatches 2;

```

QY 896 TGCCCTGGTCACTTTCT 913
Db 19 TGACCCCTGGTCACTTTCT 2

RESULT 202
ACA98827
ID ACA98827 standard; DNA; 19 BP.
AC ACA98827;
XX
XX
XX 28-JUL-2003 (first entry)
XX
XX Human CYP2C8 SNP detection PCR primer #267.
XX
XX Cytochrome P450 polypeptide 2C8; CYP2C8; arachidonic acid metabolism;
KW cancer; cardiovascular disease; cytotatic; cardiovascular; gene therapy;
KW single nucleotide polymorphism detection; SNP detection; PCR; primer; ss.
XX
XX Homo sapiens.
XX
XX WO200299099-A2.
XX
XX 12-DEC-2002.
XX
XX 31-MAY-2002; 2002WO-EP006000.
XX
XX 01-JUN-2001; 2001EP-00112899.
XX
XX (EPID-) EPIDAUS BIOTECHNOLOGIE AG.
XX
XX Penger A, Sprenger R, Brinkmann U;
XX
XX WPI; 2003-167344/16.
XX
XX New polymorphic variants of the gene encoding Cytochrome P450 polypeptide
XX 2C8 (CYP2C8), useful for diagnosing or treating a disease, e.g.
XX arachidonic acid metabolism, cancer or cardiovascular diseases.
XX
XX Claim 1; Page 53; 178pp; English.
XX
XX The invention describes a new polynucleotide comprises a polynucleotide:
XX (a) having any of 101 nucleic acid sequences with 18-19 bp fully defined
XX in the specification; (b) encoding any of seven polypeptides having 7
XX amino acids, or a polypeptide with 3 amino acids; (c) capable of
XX hybridizing to a Cytochrome P450 polypeptide 2C8 (CYP2C8) gene; (d)
XX encoding a molecular CYP2C8 variant polypeptide or its fragment. The
XX polynucleotide, gene, vector, polypeptide or antibody is useful for
XX diagnosing or treating a disease, for preparing a diagnostic composition
XX for treating a disease, or for preparing a pharmaceutical composition
XX metabolism, cancer or cardiovascular diseases. This sequence represents a
XX primer used to isolate regions of the human cytochrome P450 polypeptide
XX 2C8 gene (CYP2C8) in order to identify the single nucleotide polymorphism
XX (SNP) in that region of different individuals useful in disease diagnosis
XX
XX Sequence 19 BP; 3 A; 6 C; 3 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 14.8; DB 1; Length 19;
XX Best Local Similarity 88.9%; Pred. No. 1.9e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 896 TGCCCTGGTCACTTTCT 913
XX Db 1 TGACCCCTGGTCACTTTCT 18

RESULT 203
AAA07660/c
ID AAA07660 standard; DNA; 20 BP.
XX
XX AC AAA07660;
XX
XX
XX
XX Query Match 0.7%; Score 14.8; DB 1; Length 19;
XX Best Local Similarity 88.9%; Pred. No. 1.9e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 896 TGCCCTGGTCACTTTCT 913
XX Db 1 TGACCCCTGGTCACTTTCT 18

RESULT 204
AAS45887
ID AAS45887 standard; DNA; 20 BP.
XX
XX AC AAS45887;
XX
XX 18-DEC-2001 (first entry)
XX
XX Human PAPP-3 antisense inhibitor ISIS #126087.
XX
XX Human; ss; PAPP; Poly (ADP-ribose) polymerase; antisense oligonucleotide;
KW cytotatic; nootropic; neuroprotective; antiinflammatory; antidiabetic;
KW immunosuppressant; hyperproliferative disorder; cancer; cellular injury;
KW oxidative stress; neurological disorder; parkinsonism; apoptosis;
KW meningitis-associated intracranial complication; ischaemia; probe;
XX inflammatory disorder; autoimmune disorder; arthritis; diabetes.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /*tag= a
XX /mod_base= OTHER
XX /note= "Phosphorothioate backbone"

```

```

FT modified_base 1. .20
FT /tag= b
FT /mod_base= OTHER
FT /note= "All cytidine residues are 5-methyl cytidine"
FT modified_base 1. .5
FT /tag= c
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl nucleotides"
FT modified_base 16. .20
FT /tag= d
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl nucleotides"
XX
XX WO200164955-A1.
XX
XX 07-SEP-2001.
XX
XX 01-MAR-2001; 2001WO-US006572.
XX
XX 02-MAR-2000; 2000US-00517467.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Popoff I, Cowser LM;
XX
XX WPI; 2001-602570/68.
XX
XX Antisense compound useful for treating hyperproliferative, neurological,
XX inflammatory and autoimmune disorders and diabetes inhibits human PARP.
XX
XX Claim 3; Page 92; 168pp; English.
XX
XX The invention relates to antisense oligonucleotides targeted to human
XX PARP nucleic acid and inhibiting expression of human PARP. PARP (Poly
XX (ADP-ribose) polymerase plays an important role in chromatin
XX decondensation, DNA replication, DNA repair, gene expression, malignant
XX transformation, cellular differentiation and apoptosis. The antisense
XX oligonucleotide inhibitors are useful for inhibiting the expression of
XX PARP in human cells or tissues. They are also useful for treating a human
XX with a disease associated with PARP especially hyperproliferative
XX disorders (e.g. cancer), cellular injury resulting from oxidative stress,
XX neurological (e.g. parkinsonism, meningitis-associated intracranial
XX complications and ischaemia), inflammatory and autoimmune disorders (e.g
XX arthritis) and diabetes. The present sequence is an antisense
XX oligonucleotide of the invention
XX
XX Sequence 20 BP; 5 A; 5 C; 6 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 14.8; DB 1; Length 20;
XX Best Local Similarity 88.9%; Pred. No. 2.1e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 1273 AAGTGGGAGGACAGCGCC 1290
XX ||||| ||||| ||||| |||||
XX 1 AAGTGTGAGGACAGCTCC 18
XX
XX RESULT 205
XX AAD19265
XX ID AAD19265 standard; DNA; 20 BP.
XX
XX AC AAD19265;
XX
XX 18-DEC-2001 (first entry)
XX
XX PCR primer #5, to detect polymorphism in mammalian IL-12 p40 intron 2.
XX
XX Interleukin-12; IL-12 p40; autoimmune disease; Th1/Th2 dysregulation;
XX therapy; TaqI+ allelic variant; insulin dependant diabetes mellitus;
XX IDDM; PCR primer; ss.
XX
XX Mammalia.
XX
XX

```

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PN WO200173035-A1.
XX
XX 04-OCT-2001.
XX
XX 27-MAR-2001; 2001WO-AU000340.
XX
XX 27-MAR-2000; 2000AU-00006466.
XX
XX 15-MAY-2000; 2000US-0204366P.
XX
XX (HALL-) HALL INST MEDICAL RES WALTER & ELIZA.
XX
XX Morahan G;
XX
XX WPI; 2001-611629/70.
XX
XX Screening mammals for autoimmune diseases such as diabetes, comprises
XX identifying polymorphisms in interleukin (IL)-12 p40.
XX
XX Example 6; Page 41; 115pp; English.
XX
XX The patent discloses a method of screening mammals for autoimmune
XX diseases by identifying polymorphisms in interleukin (IL)-12 p40 gene.
XX The methods and kits of the invention are used for screening individuals,
XX families and populations for disease conditions or predispositions for
XX the development of a disease condition which is characterised,
XX exacerbated or associated with Th1/Th2 dysregulation in a mammal. They
XX are used to treat, prevent or diagnose autoimmune diseases such as IDDM
XX (Insulin dependant diabetes mellitus). The present DNA sequence is a PCR
XX primer which is used to detect polymorphism in mammalian IL-12 p40 intron
XX 2
XX
XX Sequence 20 BP; 6 A; 4 C; 6 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 14.8; DB 1; Length 20;
XX Best Local Similarity 88.9%; Pred. No. 2.1e+02;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 971 GGAAGTCCAAAGCTCTACT 988
XX ||||| ||||| ||||| |||||
XX 2 GGAAGACTAAGCTCTACT 19
XX
XX Db
XX
XX RESULT 206
XX AAD19261
XX ID AAD19261 standard; DNA; 20 BP.
XX
XX AC AAD19261;
XX
XX 18-DEC-2001 (first entry)
XX
XX PCR primer #1, to detect polymorphism in mammalian IL-12 p40 intron 2.
XX
XX Interleukin-12; IL-12 p40; autoimmune disease; Th1/Th2 dysregulation;
XX therapy; TaqI+ allelic variant; insulin dependant diabetes mellitus;
XX IDDM; PCR primer; ss.
XX
XX Mammalia.
XX
XX WO200173035-A1.
XX
XX 04-OCT-2001.
XX
XX 27-MAR-2001; 2001WO-AU000340.
XX
XX 27-MAR-2000; 2000AU-00006466.
XX
XX 15-MAY-2000; 2000US-0204366P.
XX
XX (HALL-) HALL INST MEDICAL RES WALTER & ELIZA.
XX
XX Morahan G;
XX
XX WPI; 2001-611629/70.
XX
XX

```

PT Screening mammals for autoimmune diseases such as diabetes, comprises  
PT identifying polymorphisms in interleukin (IL)-12 p40.

XX Example 6; Page 41; 115pp; English.

XX The patent discloses a method of screening mammals for autoimmune  
CC diseases by identifying polymorphisms in interleukin (IL)-12 p40 gene.  
CC The methods and kits of the invention are used for screening individuals,  
CC families and populations for disease conditions or predispositions for  
CC the development of a disease condition which is characterised,  
CC exacerbated or associated with Th1/Th2 dysregulation in a mammal. They  
CC are used to treat, prevent or diagnose autoimmune diseases such as IDDM  
CC (Insulin dependant diabetes mellitus). The present DNA sequence is a PCR  
CC primer which is used to detect polymorphism in mammalian IL-12 p40 intron  
XX 2

SQ Sequence 20 BP; 6 A; 4 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 2.1e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 971 GGAGCTCCAAAGCTCTACT 988  
|||||  
Db 2 GGAGACTAAGCTCTACT 19

RESULT 207

AAAD19263  
ID AAD19263 standard; DNA; 20 BP.

XX AC AAD19263;

XX DT 18-DEC-2001 (first entry)

XX PCR primer #3, to detect polymorphism in mammalian IL-12 p40 intron 2.

XX Interleukin-12; IL-12 p40; autoimmune disease; Th1/Th2 dysregulation;  
KW therapy; Tag1+ allelic variant; insulin dependant diabetes mellitus;  
KW IDDM; PCR primer; ss.

XX Mammalia.

OS WO200173035-A1.

XX PD 04-OCT-2001.

XX PF 27-MAR-2001; 2001WO-AU000340.

XX PR 27-MAR-2000; 2000AU-00006466.

XX PR 15-MAY-2000; 2000US-0204366P.

XX PA (HALL-) HALL INST MEDICAL RES WALTER & ELIZA.

XX PI Morahan G;

XX WPI; 2001-611629/70.

XX Screening mammals for autoimmune diseases such as diabetes, comprises  
PT identifying polymorphisms in interleukin (IL)-12 p40.

XX Example 6; Page 41; 115pp; English.

XX The patent discloses a method of screening mammals for autoimmune  
CC diseases by identifying polymorphisms in interleukin (IL)-12 p40 gene.  
CC The methods and kits of the invention are used for screening individuals,  
CC families and populations for disease conditions or predispositions for  
CC the development of a disease condition which is characterised,  
CC exacerbated or associated with Th1/Th2 dysregulation in a mammal. They  
CC are used to treat, prevent or diagnose autoimmune diseases such as IDDM  
CC (Insulin dependant diabetes mellitus). The present DNA sequence is a PCR  
CC primer which is used to detect polymorphism in mammalian IL-12 p40 intron  
XX 2

XX SQ Sequence 20 BP; 6 A; 4 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 2.1e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 971 GGAGCTCCAAAGCTCTACT 988  
|||||  
Db 2 GGAGACTAAGCTCTACT 19

RESULT 208

ABT13217

ID ABT13217 standard; DNA; 20 BP.

XX AC ABT13217;

XX DT 30-JAN-2003 (first entry)

XX DE Fanconi anaemia FANCD exon amplifying PCR primer SEQ ID No 120.

XX Cytostatic; dermatological; vasotropic; anti-anaemic; FA pathway defect;  
KW Fanconi anaemia protein complex; FANCD; DNA repair; Cockayne's syndrome;  
KW cell cycle abnormality; Fanconi anaemia; ataxia telangiectasia; cancer;  
KW Bloom's syndrome; Hereditary non-polyposis colon cancer; gene therapy;  
KW Xeroderma pigmentosum; PCR; primer; ss.

XX OS Unidentified.

XX PN WO200236761-A2.

XX PD 10-MAY-2002.

XX PF 02-NOV-2001; 2001WO-US045561.

XX PR 03-NOV-2000; 2000US-0245756P.

XX PA (DAND ) DANA FARBER CANCER INST INC.

XX PI D'andrea AD, Taniguchi T, Timmers C, Grompe M;

XX WPI; 2002-519251/55.

XX Novel isolated Fanconi anemia protein complex polypeptide; termed FANCD2,  
PT useful for treating Fanconi anemia pathway defect in cell target or for  
PT treating patient with defective FANCD2 gene.

XX Claim 8; Page 55; 103pp; English.

XX The invention relates to an isolated Fanconi anaemia protein complex  
CC (FANCD2) polypeptide. The FANCD2 protein comprises a sequence of 1472  
CC amino acids fully defined in the specification, its 90% identical  
CC sequence, a sequence encoded by a polynucleotide that is at least 90%  
CC identical to sequences given in specification such as a 5127 base pair  
CC sequence, or a fragment which is at least 50 amino acids in length. The  
CC FANCD2 protein is useful for treating an FA pathway defect in a cell  
CC target or for treating a patient with a defective FANCD2 gene. The FANCD2  
CC gene is useful for making a recombinant expression vector. The FANCD2  
CC protein and its gene are useful as a novel target for therapeutic  
CC development, and in diagnostic test and screening assays for diseases  
CC associated with DNA repair and cell cycle abnormalities such as Fanconi  
CC anaemia, Bloom's syndrome, Cockayne's syndrome. Hereditary non-polyposis  
CC colon cancer, ataxia telangiectasia and Xeroderma pigmentosum. The FANCD2  
CC gene is useful in producing probes and primers for screening patients in  
CC genetic based test, for diagnosing Fanconi anaemia and cancer, for  
CC preparing an experimental mouse model for use in screening new  
CC therapeutics for treating conditions involving defective DNA repair, and  
CC in gene therapy methods. A recombinant vector containing the FANCD2 gene  
CC of the invention is useful in gene therapy. This polynucleotide sequence  
CC represents a PCR primer for amplifying a FANCD2 exon relating to the  
XX invention

SQ Sequence 20 BP; 7 A; 6 C; 3 G; 4 T; 0 U; 0 Other;  
 Query Match 0.7%; Score 14.8; DB 1; Length 20;  
 Best Local Similarity 88.9%; Pred. No. 2.1e+02;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1062 AAACCAAGCTTCAGTCC 1079  
 DB 3 AAACCAAGCTTCAGTCC 20

RESULT 209  
 ABL58392  
 ID ABL58392 standard; DNA; 20 BP.  
 XX  
 AC ABL58392;  
 DT 30-JUL-2002 (first entry)  
 XX  
 DE Human PDE7a3 splice variant DNA amplifying primer PDE7a3For.  
 XX  
 KW Cyclic adenosine monophosphate; cAMP; cAMP phosphodiesterase type 7;  
 KW PDE7a3; splice variant; transgenic; PCR; cardiant; antiinflammatory;  
 KW antiallergic; antiaschmatic; antiinfertility; vaccine; primer; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 FH Key Location/Qualifiers  
 FT misc\_feature 3  
 FT /\*tag= a  
 FT /note= "this nucleotide is indicated as G in the sequence  
 FT listing"  
 XX  
 PN WO200183772-A1.  
 XX  
 PD 08-NOV-2001.  
 XX  
 PF 27-APR-2001; 2001WO-BF004785.  
 XX  
 PR 28-APR-2000; 2000EP-00109267.  
 XX  
 PA (MERE ) MERCK PATENT GMBH.  
 XX  
 PI Kluxen F;  
 XX  
 DR WPI; 2002-034516/04.  
 XX  
 PT New polypeptide of splice variant of cyclic adenosine monophosphate  
 PT phosphodiesterase type 7 and polynucleotides, useful as vaccines for  
 PT inducing immune response against diseases e.g. cardiovascular diseases  
 PT and asthma.  
 XX  
 PS Example; Page 27; 40pp; English.  
 XX  
 CC The invention relates to a cyclic adenosine monophosphate (cAMP)  
 CC phosphodiesterase type 7 (PDE7a3) splice variant. The polypeptide can be  
 CC expressed by standard recombinant methodology. The PDE7a3 splice variant  
 CC polypeptides and polynucleotides are useful for treating cardiovascular  
 CC diseases, asthma allergy, inflammatory diseases, fertility disorders and  
 CC immunoregulator disorders. The polynucleotides are useful for producing  
 CC transgenic animals, which include knock-in animals (in which an animal  
 CC gene is replaced by human equivalent within the genome of the animal),  
 CC useful in drug discovery process, for target validation. The PDE7a3  
 CC splice variant polypeptides and polynucleotides are useful as vaccines  
 CC for inducing an immunological response in a mammal. Sequences ABL58392-93  
 CC represent PCR primers used to verify the existence of the novel PDE7a3  
 XX

SQ Sequence 20 BP; 4 A; 8 C; 3 G; 5 T; 0 U; 0 Other;  
 Query Match 0.7%; Score 14.8; DB 1; Length 20;  
 Best Local Similarity 88.9%; Pred. No. 2.1e+02;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1128 CACCTTCACCTCCAGTCC 1145  
 DB 3 CAGCTTCAGCTCCAGTCC 20

RESULT 210  
 ABI96012/c  
 ID ABI96012 standard; DNA; 20 BP.  
 XX  
 AC ABI96012;  
 DT 16-FEB-2002 (first entry)  
 XX  
 DE Capture oligonucleotide Zip ID#3099 oligo #9.  
 XX  
 KW Human; K-ras; PCR primer; probe; capture probe; mutation detection;  
 KW ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;  
 KW infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;  
 KW oncogene; tumour suppressor; human papillomavirus; forensic;  
 KW environmental monitoring; food industry; feed industry; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO200179548-A2.  
 XX  
 PD 25-OCT-2001.  
 XX  
 PF 04-APR-2001; 2001WO-US010958.  
 XX  
 PR 14-APR-2000; 2000US-0197271P.  
 XX  
 PA (CORR ) CORNELL RES FOUND INC.  
 XX  
 PI Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;  
 XX  
 DR WPI; 2002-034366/04.  
 XX  
 PT Designing capture oligonucleotide probes for use on a support to which  
 PT complementary oligonucleotides hybridize with little mismatch.  
 XX  
 PS Example 5; Fig 29; 300pp; English.  
 XX  
 CC The present invention describes a method (M1) for designing capture  
 CC oligonucleotide probes (I) for use on a support to which complementary  
 CC oligonucleotide probes (II) will hybridize with little mismatch, where  
 CC (I) have melting temperatures within a narrow range. The method is useful  
 CC for detecting infectious diseases caused by bacterial infectious agents  
 CC e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal  
 CC infectious agents e.g. Cryptococcus neoformans, Candida albicans and  
 CC Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus,  
 CC Epstein-Barr virus and polio virus, and parasitic infectious agents  
 CC selected from Onchocerca volvulus, Entamoeba histolytica and Dracunculus  
 CC medinensis. The method is also useful for detecting genetic diseases such  
 CC as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.  
 CC Detecting cancer involving oncogenes, tumour suppressor genes, or genes  
 CC involved in DNA amplification, replication, recombination or repair, the  
 CC cancer is specifically associated with a gene selected from BRCA1 gene,  
 CC p53 gene, human papillomavirus types 16 and 18 and liver cancers. The  
 CC method is also used for environmental monitoring, forensics and the food  
 CC and feed industry, detecting comprises scanning (using e.g. a scanning  
 CC electron microscope and infrared microscope) the support at the  
 CC particular sites and identifying (if ligated of the oligonucleotide probe  
 CC sets occurred and correlating (using a computer) identified ligation to a  
 CC presence or absence of the target nucleotide sequences. ABI92074 to  
 CC ABI97546 represent oligonucleotide sequences used in the exemplification  
 CC of the present invention  
 XX  
 SQ Sequence 20 BP; 5 A; 6 C; 6 G; 3 T; 0 U; 0 Other;  
 Query Match 0.7%; Score 14.8; DB 1; Length 20;  
 Best Local Similarity 88.9%; Pred. No. 2.1e+02;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```

QY 1214 GGGCTGACCCATCCTTG 1231
Db 18 GGGCTGACTCCATCCGTG 1

RESULT 211
AEN86953/c
ID AEN86953 standard; DNA; 20 BP.
XX AC AEN86953;
XX DT 29-JUL-2002 (first entry)
XX DE Human NOV7 forward PCR primer SEQ ID NO:72.
XX KW Human; NOVX; cytostatic; antiarteriosclerotic; cardiovascular; lymphoma;
KW anti-diabetic; immunosuppressive; neuroprotective; gene therapy; cancer;
KW cardiomyopathy; atherosclerosis; cell signal processing; diabetes; AIDS;
KW metabolic pathway modulation; neoplastic; neurological disorder; asthma;
KW adenocarcinoma; prostate cancer; uterus cancer; immune response;
KW Crohn's disease; multiple sclerosis; Graft versus host disease;
KW PCR primer; ss.
XX OS Homo sapiens.
XX PN WO200230974-A2.
XX PD 18-APR-2002.
XX PF 12-OCT-2001; 2001WO-US031922.
XX PR 12-OCT-2000; 2000US-0240113P.
XX PR 16-OCT-2000; 2000US-0240623P.
XX PR 16-OCT-2000; 2000US-0240637P.
XX PR 16-OCT-2000; 2000US-0240648P.
XX PR 16-OCT-2000; 2000US-0240662P.
XX PR 16-OCT-2000; 2000US-0240669P.
XX PR 16-OCT-2000; 2000US-0240703P.
XX PR 16-OCT-2000; 2000US-0240732P.
XX PR 16-OCT-2000; 2000US-0241190P.
XX PR 18-JAN-2001; 2001US-0262455P.
XX PA (CURA-) CURAGEN CORP.
XX PA (MILL/) MILLET I.
XX PI Grosse WM, Alsbrook JP, Lepley DM, Burgess CE, Mishra V;
PI Kekuda R, Li L, Padigar M, Shimkets RA, Zernusen BD, Spytek KA;
PI Edinger S, Gerlach V, Macdougall J, Stone D, Gunther E, Ellerman K;
XX WPI; 2002-444172/47.
XX DR New NOVX polypeptides and polynucleotides, useful for treating or
XX PT preventing a NOVX-associated disorder or a pathological state in a
XX PT subject, particularly a human, e.g. cardiomyopathy, atherosclerosis,
XX PT cancer or diabetes.
XX PS Example 2; Page 205; 227pp; English.
XX CC The present invention describes novel human proteins designated NOVX
CC (where X is 1, 2a, 2b, 2c, 2d, 3, 4, 5, 6a, 6b, 7, 8, or 9). NOV1 is a
CC tyrosine-protein kinase 6-like protein; NOV2a-d are keratin 4-like
CC proteins; NOV3 is a collagen-like protein; NOV4 is a cystatin B-like
CC protein; NOV5 is a serotonergic receptor-like protein; NOV6a and NOV6b are
CC cold inducible glycoprotein 30-like proteins; NOV7 is a matrilin-2-like
CC protein; NOV8 is a leukocyte surface antigen (CD53)-like protein; and
CC NOV9 is a tyrosine kinase-like protein. NOVX sequences have cytostatic,
CC antiarteriosclerotic, cardiovascular, antidiabetic, immunosuppressive and
CC neuroprotective activities, and can be used in gene therapy. The NOVX
CC sequences can be used in therapeutics, particularly for treating,
CC preventing or alleviating a NOVX-associated disorder or a pathological
CC state in a subject, particularly a human. These disorders include
CC cardiomyopathy, atherosclerosis, a disorder related to cell signal
CC processing and metabolic pathway modulation or diabetes. The NOVX

```

CC sequences are also useful for determining the presence of or predisposition to a disease associated with altered levels of NOVX polypeptide or nucleic acid, particularly cancer. The NOVX sequences are especially useful in therapeutic or prophylactic applications for neoplastic or neurological disorders, and in the treatment of adenocarcinoma, lymphoma, prostate cancer, uterus cancer, immune response, AIDS, asthma, Crohn's disease, multiple sclerosis or Graft versus host disease. The present sequence represents a PCR primer for human NOV7, which is used in an example from the present invention

Sequence 20 BP; 7 A; 1 C; 10 G; 2 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.8; DB 1; Length 20;  
Best Local Similarity 88.9%; Pred. No. 2.1e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1133 TCACCTCCAGCTCCACCT 1150  
||| ||||| ||||| |||||  
Db 19 TCTCTCCAGCTCTCTCT 2

RESULT 212  
AAD49357  
ID AAD49357 standard; DNA; 20 BP.  
XX AC AAD49357;  
XX DT 07-MAR-2003 (first entry)  
XX DE Mouse phospholipid scramblase I antisense oligo, ISIS #120567.  
XX KW Mouse; antisense; phospholipid scramblase I; immune disorder; cancer;  
KW inflammation; hyperproliferative; antisense therapy; phosphorothioate;  
XX ss.  
XX OS Mus musculus.  
XX PN Synthetic.  
XX FH Key  
FT modified\_base 1..20 Location/Qualifiers  
FT /tag= a /mod\_base= OTHER  
FT /note= "Phosphorothioate backbone"  
FT modified\_base 1..5  
FT /tag= b /mod\_base= OTHER  
FT /note= "2'methoxyethyl nucleotides"  
FT modified\_base 2  
FT /tag= d /mod\_base= m5C  
FT modified\_base 5  
FT /tag= e /mod\_base= m5C  
FT modified\_base 8  
FT /tag= f /mod\_base= m5C  
FT modified\_base 10  
FT /tag= g /mod\_base= m5C  
FT modified\_base 11  
FT /tag= h /mod\_base= m5C  
FT modified\_base 13  
FT /tag= i /mod\_base= m5C  
FT modified\_base 14  
FT /tag= j /mod\_base= m5C  
FT modified\_base 16..20  
FT /tag= c /mod\_base= OTHER  
FT /note= "2'methoxyethyl nucleotides"  
FT modified\_base 19

```

FT  /*tag= k
XX  /mod_base= m5c
PN  WO200281495-A1.
XX  17-OCT-2002.
PD  02-APR-2002; 2002WO-US010529.
XX  05-APR-2001; 2001US-00828344.
XX  (ISIS-) ISIS PHARM INC.
PA  Bennett CF, Wyatt JR;
XX  WPI; 2003-058495/05.
XX  Novel antisense compounds targeted to nucleic acids encoding phospholipid
PT  scramble I, for modulating gene expression and treating inflammation,
PT  immune disorders and hyperproliferative conditions e.g. cancer.
XX  Claim 3; Page 80; 131pp; English.
XX  The invention relates to an antisense compound targetted to a nucleic
CC  acid molecule encoding phospholipid scramble I and which specifically
CC  hybridises with and inhibits the expression of phospholipid scramble I,
CC  or which hybridises with at least an 8-nucleobase portion of an active
CC  site on a nucleic acid molecule encoding phospholipid scramble I. The
CC  invention is useful for inhibiting the expression of human phospholipid
CC  scramble I in cells or tissues and for treating an animal having a
CC  disease or condition associated with phospholipid scramble I, such as
CC  inflammation, an immune disorder and a hyperproliferative condition, e.g.
CC  cancer. The invention is useful for diagnostics, therapeutics and as
CC  antisense oligonucleotide
XX  Sequence 20 BP; 3 A; 8 C; 2 G; 7 T; 0 U; 0 Other;
SQ  Query Match 0.7%; Score 14.8; DB 1; Length 20;
    Best Local Similarity 88.9%; Pred. No. 2.1e+02;
    Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY  1128 CACCTTCACCTCCAGCTC 1145
Db  ||||||||||||||||
    2 CATCTTCACCTCCAGCTC 19

RESULT 213
ADC42454
ID  ADC42454 standard; DNA; 20 BP.
XX  ADC42454;
AC  ADC42454;
XX  18-DEC-2003 (first entry)
DT  FANCD2 PCR primer MG789 SEQ ID NO:120.
DE  cancer; Fanconi Anaemia; FA; BRCA; cytostatic; microarray;
XX  chemosensitising; ss; PCR; primer.
XX  Synthetic.
OS  WO2003039327-A2.
PN  15-MAY-2003.
PD  06-JUN-2002; 2002WO-US018153.
XX  02-NOV-2001; 2001US-00998027.
PR  02-NOV-2001; 2001WO-US045561.
XX  (DAND ) DANA FARBER CANCER INST.
PA  (UYOR-) UNIV OREGON HEALTH SCI.

PI  D'andrea AD, Taniguchi T, Timmers C, Grompe M, Fox EA;
XX  WPI; 2003-441436/41.
XX  Diagnosing or determining cancer or increased risk of cancer in a
PT  patient, by testing Fanconi Anemia/BRCA pathway gene or protein for a
PT  cancer-associated defect, that indicates cancer or increased risk of
PT  cancer.
XX  Claim 11; SEQ ID NO 120; 160pp; English.
XX  The invention relates to a novel method of diagnosing or determining if a
CC  patient has cancer or is at increased risk of cancer, involving testing a
CC  Fanconi Anaemia (FA)/BRCA pathway gene or protein for the presence of a
CC  cancer-associated defect, where the presence of one or more cancer-
CC  associated defects is indicative of cancer or an increased risk of cancer
CC  in the patient. The method of the invention has cytostatic activity. The
CC  method is useful for determining if a patient has cancer, or is at
CC  increased risk of developing cancer, e.g. breast, ovarian or prostate
CC  cancer. A microarray of the invention is useful for determining if a
CC  patient has cancer, or is at increased risk of developing cancer, by
CC  hybridising a nucleic acid sample to the nucleic acid sequences from the
CC  array, and detecting the presence of mutations in FA/BRCA pathway genes
CC  in the nucleic acid sample from the patient, where detecting the presence
CC  of mutations is indicative of a patient who has cancer, or is at
CC  increased risk of developing cancer. A method of the invention is useful
CC  for screening a chemosensitising agent, and the agent obtained is useful
CC  for treating a patient having a cancer. The present sequence is used in
CC  the exemplification of the invention.
XX  Sequence 20 BP; 7 A; 6 C; 3 G; 4 T; 0 U; 0 Other;
SQ  Query Match 0.7%; Score 14.8; DB 1; Length 20;
    Best Local Similarity 88.9%; Pred. No. 2.1e+02;
    Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY  1062 AAACCCCAAGCTTCAGTCC 1079
Db  ||||||||||||||||
    3 AAACCCCAAGCTTCAGTCC 20

RESULT 214
AAQ58370
ID  AAQ58370 standard; DNA; 21 BP.
XX  AAQ58370;
AC  AAQ58370;
XX  25-MAR-2003 (revised)
DT  04-OCT-1994 (first entry)
DE  Antisense oligonucleotide targetted to HCV 5' end hairpin.
XX  Hepatitis C virus; HCV; non-A, non-B hepatitis virus; NANBHV;
XX  antisense oligonucleotide; translation inhibition; therapy; ss.
OS  Synthetic.
XX  WO9405813-A1.
PN  17-MAR-1994.
PD  10-SEP-1993; 93WO-JP001293.
XX  10-SEP-1992; 92US-00945289.
PR  14-APR-1993; 93JP-00087195.
XX  (MOCH ) MOCHIDA PHARM CO LTD.
PA  (KAGA ) CEMO SERO THERAPEUTIC RES INST.
XX  (ISIS-) ISIS PHARM INC.
PI  Anderson KP, Hanecak RC, Hoshiko K, Nozaki C, Nishihara T;
    Nakatake H, Hamada F, Eto T, Furukawa S;

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XX WPI; 1994-101217/12.  
 XX Anti-sense oligo:nucleotide(s) complementary to hepatitis C viral genome  
 PT - useful for inhibiting HCV replication, to treat related diseases.  
 XX  
 XX PS  
 XX Claim 5; Page 14; 91pp; English.  
 XX  
 XX Oligonucleotides which are complementary to part of the hepatitis C virus  
 CC genomic or messenger RNA are claimed. Preferred antisense  
 CC oligonucleotides (see AAQ58364-Q58387) are complementary to RNA  
 CC comprising the 5' end hairpin loop, 5' end 6bp repeat, 5' end untranslated  
 CC region, polypeptide translation initiation codon, ORF3 translation  
 CC initiation codon, 3' untranslated region, 3' end palindromic region, R2  
 CC sequence or 3' end hairpin loop of HCV. (Updated on 25-MAR-2003 to  
 CC correct PN field.)  
 XX  
 XX Sequence 21 BP; 2 A; 9 C; 8 G; 2 T; 0 U; 0 Other;  
 Query Match 0.7%; Score 14.8; DB 1; Length 21;  
 Best Local Similarity 88.9%; Pred. No. 2.5e+02;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1204 CCTATACAGGGGGCTGAC 1221  
 Db ||| ||||| ||||| |||||  
 4 CCCCATCAGGGGGCTGGC 21  
 RESULT 215  
 AAZ21375  
 ID AAZ21375 standard; DNA; 21 BP.  
 AC  
 XX AAZ21375;  
 XX  
 XX 02-DEC-1999 (first entry)  
 XX  
 XX Recombinant HIV-1 molecular clone construction primer #5.  
 XX  
 XX Human immunodeficiency virus type 1; HIV-1; viral; plasmid;  
 KW molecular clone; recombinant; drug resistance; primer; ss.  
 KW  
 XX Synthetic.  
 OS  
 OS Human immunodeficiency virus 1.  
 XX  
 XX JP11239486-A.  
 XX  
 XX 07-SEP-1999.  
 PD  
 XX 07-OCT-1998; 98JP-00300376.  
 PF  
 XX 07-OCT-1997; 97US-00946021.  
 PR  
 XX (NIHA ) JAPAN ENERGY CORP.  
 PA  
 XX WPI; 1999-554022/47.  
 DR  
 XX Recombinant human immunodeficiency type 1 virus - useful for assessment  
 PT of drug resistance.  
 PT  
 XX Disclosure; Page 18; 30pp; Japanese.  
 PS  
 XX The present invention describes a recombinant human immunodeficiency type  
 CC 1 virus (HIV-1) having a variation in the predetermined base in the  
 CC region encoding for viral protease in comparison to HIV genome gene  
 CC cloned in HIV-1 molecular clone pNL4-3, and having a (+) chain RNA genome  
 CC with modifications of A at 2591st gene of the HIV genome into C, and A at  
 CC 2594th into G, and a modified amino acid sequence corresponding to  
 CC modified base in the region encoding for the virus derived protease, and  
 CC optionally having a recombinant HIV-1 molecular clone with a plasmid  
 CC composed of the same base sequence with that of the molecular clone pNL4-  
 CC 3 in the residual base sequence. Also described are: (1) the plasmid of  
 CC plasmid pNL-321,461,84V for the recombinant HIV-1 clone; and (2) plasmids  
 CC pNL-Sma2 and pNL-delta-Pro2. The recombinant HIV-1 molecular clones can

CC be used for reliable assessment of drug resistance with the recombinant  
 CC HIV-1. AAZ21352 to AAZ21392 represent primers used in the exemplification  
 CC of the present invention  
 XX  
 XX Sequence 21 BP; 6 A; 11 C; 0 G; 4 T; 0 U; 0 Other;  
 Query Match 0.7%; Score 14.8; DB 1; Length 21;  
 Best Local Similarity 88.9%; Pred. No. 2.5e+02;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1135 ACCTCCAGCTCCACTAT 1152  
 Db ||||| ||||| ||||| |||||  
 3 ACCTCCAACTCCCTCAT 20  
 RESULT 216  
 AAF82554/C  
 ID AAF82554 standard; DNA; 21 BP.  
 AC  
 XX AAF82554;  
 XX  
 XX 18-JUN-2001 (first entry)  
 DT  
 XX Human Atr-2 cDNA PCR primer SLQrev.  
 DE  
 XX Human; Atr-2; cell cycle checkpoint protein; cytostatic; gene therapy;  
 KW phosphatidylinositol kinase; PIK; DNA damage repair; cancer;  
 KW breast cancer; small cell carcinoma; brain tumour; bone cancer;  
 KW PCR primer; ss.  
 KW  
 XX Homo sapiens.  
 OS  
 XX WO200127288-A1.  
 PN  
 XX 19-APR-2001.  
 PD  
 XX 13-OCT-2000; 2000WO-US028518.  
 PF  
 XX 14-OCT-1999; 99US-00417822.  
 PR  
 XX (ICOS-) ICOS CORP.  
 PA  
 XX Loughney K, Keegan KS;  
 XX  
 XX WPI; 2001-273777/28.  
 DR  
 XX Novel Atr-2 polypeptide and polynucleotide are used for the treatment of  
 PT diseases associated with aberrant Atr-2 activity in different forms of  
 PT cancer e.g. metastatic cancer, locally advanced tumors and bone cancer.  
 PT  
 XX Example 2; Page 42; 110pp; English.  
 PS  
 XX The present sequence was used to isolate clones containing the 3' end of  
 CC the Atr-2 coding sequence. Atr-2 is a member of the phosphatidylinositol  
 CC kinase (PIK)-related family of kinases, which are involved in cell cycle  
 CC checkpoints and DNA damage repair. The Atr-2 polypeptide, antibodies  
 CC against Atr-2, and modulators of Atr-2 activity are used to modulate  
 CC disease states associated with Atr-2 expression and/or biological  
 CC activity. Aberrant Atr-2 activity is associated with forms of cancer,  
 CC e.g. metastatic cancer, locally advanced tumors, breast cancer, small  
 CC cell carcinomas, intrinsic brain tumors and bone cancers. The anti-Atr-2  
 CC antibodies can be used as detecting agents to detect or quantitate Atr-2  
 XX  
 XX Sequence 21 BP; 4 A; 6 C; 5 G; 6 T; 0 U; 0 Other;  
 Query Match 0.7%; Score 14.8; DB 1; Length 21;  
 Best Local Similarity 88.9%; Pred. No. 2.5e+02;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 808 TGTAAGAAAGCCCTGAG 825  
 Db ||||| ||||| ||||| |||||  
 19 TGTAAGACAGCCTGCAG 2

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RESULT 217
ADE13666/c
ID ADE13666 standard; DNA; 21 BP.
XX
AC ADE13666;
XX
29-JAN-2004 (first entry)
XX
RT-PCR primer #2 for rat CIRL-3 mRNA.
XX
Antisense; calcium-independent receptor alpha-latrotoxin-3; CIRL-3;
KW CIRL expression; ischaemic stroke; hippocampal neuron cell;
KW neurodegeneration; vasotrophic; cerebroprotective; rat; CA1 neuron;
KW CA3 neuron; reverse transcription-PCR; RT-PCR; primer; ss.
XX
Rattus sp.
XX
US2003143738-A1.
XX
31-JUL-2003.
XX
08-NOV-2002; 2002US-00291046.
XX
08-NOV-2001; 2001US-0336980P.
XX
(YOKO/) YOKOTA H.
PA (SUNH/) SUN H B.
PA (XUZC/) XU Z C.
PA (RUAN/) RUAN Y.
XX
Yokota H, Sun HB, Xu ZC, Ruan Y;
XX
WPI; 2003-851786/79.
XX
New antisense oligonucleotide targeted to a nucleic acid molecule
PT encoding a calcium-independent receptor for alpha-latrotoxin, useful for
PT treating ischemic stroke.
XX
Example 1; SEQ ID NO 6; 18pp; English.
XX
The present invention relates to antisense molecules targeted to
CC polynucleotide sequences encoding calcium-independent receptor alpha-
CC latrotoxin (CIRL). The antisense molecule specifically hybridises with
CC the polynucleotide sequence encoding CIRL and inhibits the expression of
CC CIRL. Also disclosed is a method for inhibiting the expression of CIRL in
CC human cells or tissues in vitro. The antisense oligonucleotides and
CC method of the invention are useful for treating ischaemic stroke. The
CC antisense oligonucleotide enters hippocampal cells and binds specifically
CC to the polynucleotide sequence encoding CIRL. The oligonucleotide blocks
CC neurodegeneration of hippocampal neuron cells caused by ischaemia and it
CC comprises at least one modified internucleoside linkage. The modified
CC internucleoside linkage is a phosphorothioate linkage. The present
CC sequence represents a reverse transcription (RT)-PCR primer used to
CC analyse mRNA expression levels of CIRL in rat CA1 and CA3 neurons.
XX
SQ Sequence 21 BP; 3 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
Query Match 0.7%; Score 14.8; DB 1; Length 21;
Best Local Similarity 88.9%; Pred. No. 2.5e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 737 AACAGAACCCGTGTGCA 754
Dd 21 AACAGAACCCGTGTGCA 4
RESULT 218
ADE86064/c
ID ADE86064 standard; DNA; 21 BP.
XX
AC ADE86064;
XX
29-JAN-2004 (first entry)
XX
RT-PCR primer for detecting Escherichia coli rfbE gene.
XX
virulence; verocytotoxin; rfbE; PCR; primer; ss.
XX
Escherichia coli.
XX
WO2003062464-A2.
XX
31-JUL-2003.
XX
07-JAN-2003; 2003WO-CA000042.
XX
23-JAN-2002; 2002US-0349981P.
XX
(CNDG ) CANADA MIN HEALTH.
XX
Wang G, Rodgers FG;
XX
WPI; 2003-902660/82.
XX
New primers for detecting Escherichia coli virulence-related genes using
PT a DNA amplification reaction are useful to detect E. coli serotype O157
PT H7 in food, environmental, veterinary and clinical samples.
XX
Claim 1; SEQ ID NO 17; 34pp; English.
XX
The present sequence is that of PCR primer rfbE-a, which corresponds to
CC nucleotides 673-693 of the rfbE gene of Escherichia coli. It is used with
CC primer rfbE-b ADE86065 to amplify a 327 bp portion of the gene. The
CC invention provides a single kit comprising 3 multiplex PCR assays that
CC can detect in E. coli the presence of the 8 virulence genes: eaeA, EHEC-
CC HlyA, Stx1 (VT1), Stx2 (VT2), Stx2c (VT2c), Stx2d (VT2d), Stx2e (VT2e)
CC and Stx2f (VT2f). The kit can also detect the 2 critical serotypes (O157
CC and H7) and identify the species (E. coli) simultaneously using a one-
CC step reaction. The kit comprises 11 primer pairs ADE86048-ADE86069. It is
CC useful for detecting E. coli serotype O157 H7 particularly in faecal,
CC environmental, veterinary, medical diagnostic and food samples,
CC especially environmental samples of drinking or recreational water, and
CC food samples of ground beef, apple juice, milk, salami, alfalfa sprouts
CC and lettuce. The primers are designed to target the coding regions of
CC genes and to avoid areas of homology within the structural genes for the
CC VT2 family. DNA was extracted from a positive reference E. coli strain
CC and used as a template in a standard PCR reaction using the primer sets.
CC Reliable amplification was obtained with all primer sets. As a negative
CC control all sets were tested with E. coli strain ATCC 25922 in which
CC only the control 16S rRNA band was amplified. Genomic DNAs from
CC Campylobacter jejuni and Aeromonas hydrophila were tested and none showed
CC specific PCR amplification.
XX
SQ Sequence 21 BP; 6 A; 2 C; 9 G; 4 T; 0 U; 0 Other;
Query Match 0.7%; Score 14.8; DB 1; Length 21;
Best Local Similarity 88.9%; Pred. No. 2.5e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1125 TTCACCTTCACCTCCAG 1142
Dd 18 TTCACCTTCACCTGTAG 1
RESULT 219
AAQ73380/c
ID AAQ73380 standard; DNA; 16 BP.
XX
AC AAQ73380;
XX
25-MAR-2003 (revised)
DT 02-MAY-1995 (first entry)
XX
XX
Anti-HSV-1 G4 oligo #5676.
XX

```

KW Hybridise; herpes simplex virus; HSV; open reading frame;  
 KW translation initiation site; coding region; 5' UTR; ss.  
 OS Synthetic.

PN WO9419945-A1.

PD 15-SEP-1994.

XX 07-MAR-1994; 94WO-US002471.

XX 12-MAR-1993; 93US-00031147.

XX (ISIS-) ISIS PHARM INC.

PI Draper KG, Crooke ST, Mirabelli CK, Ecker DJ, Hanecak R;

PI Anderson KP, Brown-Driver VL, Wyatt JR;

XX WPI; 1994-302552/37.

XX New oligonucleotide(s) hybridising with DNA or RNA of herpesvirus gene -  
 PT are used in the treatment and diagnosis of herpes simplex virus;  
 PT cytomegalovirus, Epstein Barr virus and varicella zoster infections.

XX Claim 12; Page 36; 72pp; English.

XX The sequences given in AAQ73325-81 represent oligonucleotides which  
 CC hybridise specifically with DNA or RNA from a herpes virus gene  
 CC corresponding to one of the open reading frames UL5, -8, -9, -20, -27-  
 CC 29, -30, -42, -52 or 1B175 of herpes simplex virus type 1 (HSV-1). These  
 CC oligos pref. hybridise with a translation initiation site, a coding  
 CC region or a 5' untranslated region. These oligos may be used in  
 CC compositions for the treatment and diagnosis of herpes viral infection,  
 CC by contacting the virus or the animal, or its cells, tissues or body  
 CC fluids with the oligo. (Updated on 25-MAR-2003 to correct PN field.)

SQ Sequence 16 BP; 0 A; 0 C; 12 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.4; DB 1; Length 16;

Best Local Similarity 93.8%; Pred. No. 1.3e+02;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1251 CCCCATCCCCCAACCCC 1266

DB 16 CCCCAACCCCAACCCC 1

RESULT 220

AAQ61993/c

ID AAQ61993 standard; DNA; 16 BP.

XX AAQ61993;

XX AC

XX 25-MAR-2003 (revised)

DT 04-NOV-1994 (first entry)

XX Guanine quartet containing oligomer, #4.

XX Inhibition; replication; herpes simplex virus; HSV; HIV; retard;  
 KW human cytomegalovirus; influenza virus; inflammation; telomere length;  
 KW neurological disorders; phospholipase A2 activity; hyperproliferation;  
 KW malignancy; cardiovascular disease; snake bite; malignancy; aging; ss.

OS Synthetic.

XX Key Location/Qualifiers

FT misc\_feature 1..16

FT /\*tag= a

FT /note= "Phosphorothionate intersugar linkages"

XX WO9408053-A1.

XX 14-APR-1994.

XX 29-SEP-1993; 93WO-US009297.

XX 29-SEP-1992; 92US-00954185.

XX (ISIS-) ISIS PHARM INC.

XX Hanecak RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;

PI Ecker DJ, Vickers TA, Wyatt JR, Imbach JL;

XX WPI; 1994-135613/16.

XX New modified oligo-nucleotide contg guanine quartet - inhibits activity  
 of viruses, e.g. HIV, and phospholipase A2 and modulates telomere length  
 of chromosomes.

XX Disclosure; Page 106; 144pp; English.

XX The sequences given in AAQ61990-2001 are oligonucleotides which contain  
 CC G4 or G3 stretches and which may be used for inhibiting replication of  
 CC herpes simplex virus (HSV), activity of HIV, human cytomegalovirus or  
 CC influenza virus, or for treating inflammatory and neurological disorders  
 CC caused by phospholipase A2 activity in cases of hyper- proliferation,  
 CC malignancy, cardiovascular disease and snake bite. Oligonucleotides such  
 CC as these, may be used for inhibiting division of malignant cells by  
 CC modulating telomere length, which may also retard aging. (Updated on 25-  
 CC MAR-2003 to correct PN field.)

SQ Sequence 16 BP; 0 A; 0 C; 12 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.4; DB 1; Length 16;

Best Local Similarity 93.8%; Pred. No. 1.3e+02;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1251 CCCCATCCCCCAACCCC 1266

DB 16 CCCCAACCCCAACCCC 1

RESULT 221

AAQ61898/c

ID AAQ61898 standard; DNA; 16 BP.

XX AAQ61898;

XX AC

XX 25-MAR-2003 (revised)

DT 04-NOV-1994 (first entry)

XX HSV replication inhibiting oligomer, ISIS no 5676.

XX Inhibition; replication; herpes simplex virus; HSV; HIV;  
 KW human cytomegalovirus; influenza virus; inflammation;  
 KW neurological disorders; phospholipase A2 activity; hyperproliferation;  
 KW malignancy; cardiovascular disease; snake bite; malignancy;  
 KW telomere length; retard; aging; ss.

OS Synthetic.

XX Key Location/Qualifiers

FT misc\_feature 1..16

FT /\*tag= a

FT /note= "Phosphorothionate intersugar linkages"

XX WO9408053-A1.

XX 14-APR-1994.

XX 29-SEP-1993; 93WO-US009297.

XX 29-SEP-1992; 92US-00954185.

XX (ISIS-) ISIS PHARM INC.

PI Hanecak RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;  
 PI Ecker DJ, Vickers TA, Wyatt JR, Imbach JL;  
 XX WPI; 1994-135613/16.  
 XX  
 XX New modified oligo-nucleotide contg guanine quartet - inhibits activity  
 PT of viruses, e.g. HIV, and phospholipase A2 and modulates telomere length  
 PT of chromosomes.  
 XX  
 XX Claim 5; Page 19; 144pp; English.  
 XX  
 XX The sequences given in AAQ61825-50 and AAQ61886-906 are oligonucleotides  
 CC which contain a G4 or two G3 stretches and which may be used for  
 CC inhibiting replication of herpes simplex virus (HSV). Oligonucleotides  
 CC such as these may also be used for inhibiting activity of HIV, human  
 CC cytomegalovirus or influenza virus, or for treating inflammatory and  
 CC neurological disorders caused by phospholipase A2 activity in cases of  
 CC hyperproliferation, malignancy, cardiovascular disease and snake bite.  
 CC They may also be used for inhibiting division of malignant cells by  
 CC modulating telomere length, which may also retard aging. (Updated on 25-  
 XX MAR-2003 to correct PN field.)  
 XX  
 SQ Sequence 16 BP; 0 A; 0 C; 12 G; 4 T; 0 U; 0 Other;  
 Query Match 0.7%; Score 14.4; DB 1; Length 16;  
 Best Local Similarity 93.8%; Pred. No. 1.3e+02;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1251 CCCCATCCCCAACCCC 1266  
 Db 16 CCCCAACCCCAACCCC 1  
 RESULT 222  
 AAQ61914/c  
 ID AAQ61914 standard; DNA; 16 BP.  
 XX  
 XX AAQ61914;  
 XX  
 XX 25-MAR-2003 (revised)  
 DT 04-NOV-1994 (first entry)  
 XX  
 XX HIV replication inhibiting oligomer, ISIS no 5669.  
 XX  
 XX Inhibition; replication; herpes simplex virus; HSV; HIV;  
 KW human cytomegalovirus; influenza virus; inflammation;  
 KW neurological disorders; phospholipase A2 activity; hyperproliferation;  
 KW malignancy; cardiovascular disease; snake bite; malignancy;  
 KW telomere length; retard; aging; ss.  
 XX  
 OS Synthetic.  
 XX  
 XX Key Location/Qualifiers  
 FH misc\_feature 1..16  
 FT /tag= a  
 FT /note= "Phosphorothionate intersugar linkages"  
 XX  
 XX WO9408053-A1.  
 XX  
 XX 14-APR-1994.  
 XX  
 XX 29-SEP-1993; 93WO-US009297.  
 XX  
 XX 29-SEP-1992; 92US-00954185.  
 XX  
 XX (ISIS-) ISIS PHARM INC.  
 XX  
 XX Hanecak RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;  
 PI Ecker DJ, Vickers TA, Wyatt JR, Imbach JL;  
 XX WPI; 1994-135613/16.  
 XX  
 XX New modified oligo-nucleotide contg guanine quartet - inhibits activity

PT of viruses, e.g. HIV, and phospholipase A2 and modulates telomere length  
 PT of chromosomes.  
 XX  
 XX Disclosure; Page 23; 144pp; English.  
 XX  
 XX The sequences given in AAQ61913-16 are oligonucleotides which contain a  
 CC G4 stretch and which may be used for inhibiting replication of human  
 CC immunodeficiency virus (HIV). Oligonucleotides such as these may also be  
 CC used for inhibiting activity of HSV, human cytomegalovirus or influenza  
 CC virus, or for treating inflammatory and neurological disorders caused by  
 CC phospholipase A2 activity in cases of hyper-proliferation, malignancy,  
 CC cardiovascular disease and snake bite. They may also be used for  
 CC inhibiting division of malignant cells by modulating telomere length,  
 CC which may also retard aging. (Updated on 25-MAR-2003 to correct PN  
 CC field.)  
 XX  
 SQ Sequence 16 BP; 0 A; 0 C; 12 G; 4 T; 0 U; 0 Other;  
 Query Match 0.7%; Score 14.4; DB 1; Length 16;  
 Best Local Similarity 93.8%; Pred. No. 1.3e+02;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1251 CCCCATCCCCAACCCC 1266  
 Db 16 CCCCAACCCCAACCCC 1  
 RESULT 223  
 AAQ97986/c  
 ID AAQ97986 standard; DNA; 16 BP.  
 XX  
 XX AAQ97986;  
 XX  
 XX 25-MAR-2003 (revised)  
 DT 19-OCT-1995 (first entry)  
 XX  
 XX Peptide nucleic acid oligomer targeting HIV gene.  
 XX  
 XX Peptide nucleic acid; PNA; HIV; human immunodeficiency virus; AIDS;  
 KW antiviral; antisense; triple helix; ss.  
 XX  
 OS Synthetic.  
 XX  
 XX Key Location/Qualifiers  
 FH misc\_feature 1..16  
 FT /tag= a  
 FT /note= "at least one (and preferably all) of the backbone  
 FT subunits are composed of N-acetyl N-(2-aminoethyl)glycine  
 FT peptide residues, the nucleobase being attached  
 FT covalently to the acetyl group and the peptide linkage  
 FT being formed by condensation of the glycine carboxy group  
 FT of one residue with the amino group of the 2-aminoethyl  
 FT moiety in the next residue"  
 XX  
 XX WO9504068-A1.  
 XX  
 XX 09-FEB-1995.  
 XX  
 XX 28-JUL-1994; 94WO-US008517.  
 XX  
 XX 29-JUL-1993; 93US-00099718.  
 XX  
 XX (ISIS-) ISIS PHARM INC.  
 XX  
 XX Ecker DJ;  
 XX  
 XX WPI; 1995-082179/11.  
 XX  
 XX Oligomer hybridisable to HIV sequence and contg. peptide nucleic acid  
 PT sub-unit - binds in complementary manner to DNA and RNA, and useful for  
 PT modulating HIV viral activity, e.g. in treating AIDS.  
 XX  
 XX Claim 2; Page 176; 186pp; English.

XX New peptide nucleic acid (PNA) oligomers are provided which (a) consist  
 CC of naturally occurring nucleobases covalently bound to a polyamide  
 CC backbone and (b) hybridise to the translation initiation AUG region, 5'  
 CC untranslated region (5' UTR), 3' untranslated region (3' UTR), splice  
 CC junctions or coding sequence of a human immunodeficiency virus gene  
 CC chosen from env, gag, pol, rev and tat. The PNAs can be used to target  
 CC RNA and single stranded DNA (ssDNA) to produce antisense-type gene  
 CC regulation moieties. They have utility as gene-targeted drugs for  
 CC modulating HIV processes. Hence they can be used to treat AIDS and other  
 CC viral infections. They are also useful in diagnostic applications and as  
 CC research tools. PNA oligomers have high affinity for complementary single  
 CC stranded DNA. They are also able to form triple helices in which a first  
 CC PNA strand binds with RNA or ssDNA and a second PNA strand binds with the  
 CC resulting double helix or with the first PNA strand. The PNAs possess no  
 CC significant charge and are water soluble, which facilitates cellular  
 CC uptake. Further, since they contain amides of non-biological amino acids,  
 CC they are biostable and resistant to enzymatic degradation by proteases.  
 CC The present sequence is a specifically claimed PNA sequence (represented  
 CC by the sequence of nucleobases) targetting HIV genes. (Updated on 25-MAR-  
 CC 2003 to correct EN field.)  
 XX  
 SQ Sequence 16 BP; 0 A; 0 C; 12 G; 4 T; 0 U; 0 Other;  
 Query Match 0.7%; Score 14.4; DB 1; Length 16;  
 Best Local Similarity 93.8%; Pred. No. 1.3e+02;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1251 CCCGATCCCAACCC 1266  
 DB 16 CCCCAACCCCAACCC 1  
 RESULT 224  
 ABK0810/c  
 ID ABK0810 standard; RNA; 17 BP.  
 AC ABK0810;  
 XX  
 DT 12-MAR-2002 (first entry)  
 DE Human NOGO Inozyme #80.  
 XX  
 KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;  
 KW cerebroprotective; nootropic; neuroprotective; antiparkinsonian;  
 KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;  
 KW DNazyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;  
 KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;  
 KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;  
 KW MCL; immunocytoma; IMC; immune thrombocytopenia; stroke; dementia;  
 KW inflammatory arthropathy; central nervous system injury;  
 KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;  
 KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;  
 KW Parkinson's disease; ataxia; Huntington's disease;  
 KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.  
 XX  
 OS Homo sapiens.  
 OS Synthetic.  
 XX  
 PN WO200159103-A2.  
 XX  
 PD 16-AUG-2001.  
 XX  
 PF 09-FEB-2001; 2001WO-US004273.  
 XX  
 PR 11-FEB-2000; 2000US-0181797P.  
 PR 28-FEB-2000; 2000US-0185516P.  
 PR 06-MAR-2000; 2000US-0187128P.  
 XX  
 XX (RIBO-) RIBOZYME PHARM INC.  
 PA (BLAT/) BLATT L.  
 PA (MCSW/) MCSWIGGEN J.  
 PA (CHOW/) CHOWRIRA B M.

XX Blatt L, Mcswiggen J, Chowrira BM;  
 XX WPI; 2001-607195/69.  
 DR  
 PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense  
 CC constructs, which down regulate expression of a CD20 gene or neurite  
 CC growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and  
 CC central nervous system injury.  
 XX  
 PS Claim 88; Page 79; 200pp; English.  
 XX  
 CC The invention relates to a nucleic acid molecule which down regulates  
 CC expression of a CD20 gene and a nucleic acid molecule which down  
 CC regulates expression of a neurite growth inhibitor gene (NOGO). The  
 CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a  
 CC DNazyme) an inozyme (an endolytic nucleic acid cleaving an RNA molecule  
 CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) pr  
 CC an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA  
 CC with a VGY motif). The CD20-targetting nucleic acid is used to cleave RNA  
 CC of CD20 in the presence of a divalent cation that is preferably Mg<sup>2+</sup>.  
 CC Furthermore, it may be contacted with a cell to reduce CD20 activity of  
 CC the cell and treat a patient having a condition associated with the level  
 CC of CD20. The treatment may further comprise the use of one or more  
 CC therapies. In particular, the CD20 targeting nucleic acid may be used to  
 CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-  
 CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic  
 CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell  
 CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,  
 CC immune thrombocytopenia, and inflammatory arthropathy. The NOGO-  
 CC targetting nucleic acid is used to cleave RNA of the NOGO gene in the  
 CC presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, the  
 CC nucleic acid may be contacted with a cell to reduce NOGO activity of the  
 CC cell and treat a patient having a condition associated with the level of  
 CC NOGO. The treatment may further comprise the use of one or more  
 CC therapies. In particular, the NOGO-targetting nucleic acid may be used to  
 CC treat central nervous system (CNS) injury and cerebrovascular accident  
 CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),  
 CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),  
 CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob  
 CC disease, muscular dystrophy, and/or other neurodegenerative disease  
 CC states which respond to the modulation of NOGO expression. The present  
 CC sequence is an inozyme of the invention  
 XX  
 SQ Sequence 17 BP; 3 A; 2 C; 10 G; 0 T; 2 U; 0 Other;  
 Query Match 0.7%; Score 14.4; DB 1; Length 17;  
 Best Local Similarity 93.8%; Pred. No. 1.6e+02;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1134 CACCTCCAGCTCCACC 1149  
 DB 16 CACCTCCAGCTCCCTCC 1  
 RESULT 225  
 ACC51738/c  
 ID ACC51738 standard; DNA; 17 BP.  
 XX  
 AC ACC51738;  
 XX  
 DT 27-JUN-2003 (first entry)  
 XX  
 DE Human tumour suppressor sequence #505.  
 XX  
 KW ss; tumour suppressor; antitumour; cytostatic; tumour suppression;  
 KW tumour regression; apoptosis; virus resistance; diagnosis;  
 KW cellular degeneration.  
 XX  
 OS Homo sapiens.  
 XX  
 XX FR2826373-A1.  
 XX

PD 27-DEC-2002.  
 XX  
 PF 20-JUN-2001; 2001PR-00008139.  
 XX  
 PR 20-JUN-2001; 2001PR-00008139.  
 XX  
 PA (MOLE-) MOLECULAR ENGINES LAB SA.  
 XX  
 XX Tuijnder M, Telerman A, Amson R;  
 XX WPI; 2003-250498/25.  
 XX  
 PT New nucleic acid sequences associated with tumor suppression, regression,  
 PT apoptosis or virus resistance are useful to diagnose and treat viral  
 PT disease, development of tumor cells and cell degeneration.  
 XX  
 XX Claim 1; Page 157; 798pp; French.  
 XX  
 CC This sequence represents an isolated nucleic acid sequence associated  
 CC with tumor suppression or regression, apoptosis or virus resistance. The  
 CC invention relates to these sequences or sequences having at least 80%  
 CC identity to them, and polypeptides encoded by the sequences or  
 CC polypeptides having 80% identity to the polypeptide sequences. The  
 CC invention is used to diagnose or treat viral disease or disease  
 CC characterized by development of tumor cells or cellular degeneration  
 XX  
 XX Sequence 17 BP; 3 A; 4 C; 6 G; 4 T; 0 U; 0 Other;  
 XX  
 Query Match 0.7%; Score 14.4; DB 1; Length 17;  
 Best Local Similarity 93.8%; Pred. No. 1.6e+02;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 XX  
 QY 881 GCACACAGTGTGTT 896  
 DB 17 GCACACAGTGTGAT 2  
 XX  
 RESULT 226  
 AAD53249/C  
 ID AAD53249 standard; DNA; 17 BP.  
 XX  
 AC AAD53249;  
 XX  
 DT 28-MAY-2003 (first entry)  
 XX  
 DE PCR primer #14 used to construct P:55Gag and p1-p6 hybrid.  
 XX  
 KW Twisted gastrulation; Tsgl01; human immunodeficiency virus; HIV;  
 KW gene therapy; peptide therapy; PCR; primer; ss.  
 OS Unidentified.  
 XX  
 XX WO200294314-A1.  
 XX  
 XX 28-NOV-2002.  
 XX  
 XX 21-MAY-2002; 2002WO-US015965.  
 XX  
 XX 21-MAY-2001; 2001US-0292761P.  
 XX  
 XX (UUNY ) UNIV NEW YORK STATE RES FOUND.  
 XX  
 XX Cohen SN, Carter C, Goff A, Ehrlich L;  
 XX WPI; 2003-148440/14.  
 XX  
 XX Identifying twisted gastrulation 101 peptide, for treating human  
 PT immunodeficiency virus (HIV) infection, comprises comparing the level of  
 PT HIV viral particles in a mammalian cell culture to that in a control  
 PT culture.  
 XX  
 XX Example 1; Col 22; 35pp; English.  
 PS  
 XX

CC The invention relates to a method of identifying a mammalian twisted  
 CC gastrulation (Tsg) 101 peptide. The method involves measuring the level  
 CC of human immunodeficiency virus (HIV) viral particles released in a  
 CC culture of mammalian cells having an expression construct comprising a  
 CC portion of the coding sequence of a mammalian Tsgl01 gene and comparing  
 CC the level of HIV viral particles to that in a culture of control  
 CC mammalian cells. The method is useful in identifying a peptide that is  
 CC effective in reducing HIV particle production or which may be used in  
 CC treating a patient infected with HIV or other retrovirus. The invention  
 CC is useful in gene therapy and peptide therapy. The present sequence is a  
 CC PCR primer used to construct P:55Gag and p1-p6 hybrid for expression in  
 CC yeast. This primer is used to illustrate the method of the invention  
 XX  
 XX Sequence 17 BP; 6 A; 6 C; 5 G; 0 T; 0 U; 0 Other;  
 XX  
 Query Match 0.7%; Score 14.4; DB 1; Length 17;  
 Best Local Similarity 93.8%; Pred. No. 1.6e+02;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 XX  
 QY 891 GCTGTGCCCCCTGGTC 906  
 DB 16 GCTGTGCCCCCTGGTC 1  
 XX  
 RESULT 227  
 ACD50662  
 ID ACD50662 standard; RNA; 17 BP.  
 XX  
 AC ACD50662;  
 XX  
 DT 23-SEP-2003 (first entry)  
 XX  
 DE HBV hammerhead ribozyme substrate sequence #179.  
 XX  
 KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;  
 KW RNA stability; RNA expression; RNA synthesis; antisense;  
 KW enzymatic nucleic acid; hammerhead ribozyme; DNase; zinzyme;  
 KW amberyne; G-cleaver ribozyme; decoy molecule; aptamer;  
 KW HBV reverse transcriptase; Enhancer I region; viral replication;  
 KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;  
 KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;  
 KW virucide; antiinflammatory; substrate; ss.  
 XX  
 OS Hepatitis B virus.  
 XX  
 XX WO200281494-A1.  
 XX  
 XX 17-OCT-2002.  
 XX  
 XX 26-MAR-2002; 2002WO-US009187.  
 XX  
 XX 26-MAR-2001; 2001US-00817879.  
 PR  
 PR 08-JUN-2001; 2001US-00877478.  
 PR  
 PR 08-JUN-2001; 2001US-0296876P.  
 PR  
 PR 24-OCT-2001; 2001US-0335059P.  
 PR  
 PR 05-DEC-2001; 2001US-0337055P.  
 XX  
 XX (RIBO-) RIBOZYME PHARM INC.  
 PA  
 PA (BLAT/) BLATT L.  
 PA (MACE/) MACEJAK D.  
 PA (MCSW/) MCSWIGGEN J.  
 PA (MORR/) MORRISSEY D.  
 PA (PAVC/) PAVCO P.  
 PA (LEEP/) LEE P.  
 PA (DRAP/) DRAPER K.  
 PA (ROBE/) ROBERTS E.  
 XX  
 XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;  
 PI Draper K, Roberts E;  
 XX WPI; 2003-229207/22.  
 DR  
 XX Novel compound useful for treating cirrhosis, liver failure,  
 PT

PT hepatocellular carcinoma, or condition associated with hepatitis C virus  
XX infection.  
PS Example 1; Page 139; 387pp; English.  
XX  
CC The present invention relates to nucleic acid molecules which modulate  
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or  
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense  
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,  
CC inozymes, zinzymes, amberszymes, and G-cleaver ribozymes. Also disclosed  
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse  
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well  
CC as oligonucleotides that specifically bind the Enhancer I region of HBV  
CC DNA. The nucleic acids may be used to modulate the expression of HBV  
CC genes and HBV viral replication. Also disclosed is a method for screening  
CC compounds and/or potential therapies directed against HBV, and compounds  
CC that modulate the expression and/or replication of HCV. The compounds and  
CC methods of the invention are useful for the treatment of degenerative and  
CC disease states related to HBV and HCV infection, replication and gene  
CC expression such as cirrhosis, liver failure, and hepatocellular  
CC carcinoma. The present sequence represents a substrate for one of the HBV  
CC ribozyme, inozyme, G-cleaver, zinzyme, DNazyme or amberszyme sequences  
CC disclosed in the present invention  
XX  
SQ Sequence 17 BP; 2 A; 2 C; 1 G; 0 T; 12 U; 0 Other;  
Query Match 0.7%; Score 14.4; DB 1; Length 17;  
Best Local Similarity 25.0%; Pred. No. 1.6e+02;  
Matches 4; Conservative 11; Mismatches 1; Indels 0; Gaps 0;  
QY 907 ATTTCTTTGTCCTTT 922  
|:::|:::|:::|:::|  
Db 2 AUUUUUUUUUUUUUU 17  
RESULT 228  
ACD50664  
ID ACD50664 standard; RNA; 17 BP.  
XX ACD50664;  
XX  
DT 23-SEP-2003 (first entry)  
XX  
DE HBV hammerhead ribozyme substrate sequence #181.  
XX  
KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;  
KW RNA stability; RNA expression; RNA synthesis; antisense;  
KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; zinzyme;  
KW amberszyme; G-cleaver ribozyme; decoy molecule; aptamer;  
KW HBV reverse transcriptase; Enhancer I region; viral replication;  
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;  
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;  
KW virucide; antiinflammatory; substrate; ss.  
XX  
OS Hepatitis B virus.  
XX  
DE  
XX  
PN WO200281494-A1.  
XX  
PD 17-OCT-2002.  
XX  
PF 26-MAR-2002; 2002WO-US009187.  
XX  
XX 26-MAR-2001; 2001US-00817879.  
PR 08-JUN-2001; 2001US-00877478.  
PR 08-JUN-2001; 2001US-0296876P.  
PR 24-OCT-2001; 2001US-0335059P.  
PR 05-DEC-2001; 2001US-0337055P.  
XX  
XX (RIBO-) RIBOZYME PHARM INC.  
PA (BLAT/) BLATT L.  
PA (MACE/) MACEJAK D.  
PA (MCSW/) MCSWIGEN J.  
PA (MORR/) MORRISSEY D.

PA (PAVC/) PAVCO P.  
PA (LSEP/) LEE P.  
PA (DRAP/) DRAPER K.  
PA (ROBE/) ROBERTS E.  
XX  
PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;  
PI Draper K, Roberts E;  
XX  
XX WPI; 2003-229207/22.  
XX  
PT Novel compound useful for treating cirrhosis, liver failure,  
PT hepatocellular carcinoma, or condition associated with hepatitis C virus  
PT infection.  
XX  
XX Example 1; Page 139; 387pp; English.  
XX  
CC The present invention relates to nucleic acid molecules which modulate  
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or  
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense  
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,  
CC inozymes, zinzymes, amberszymes, and G-cleaver ribozymes. Also disclosed  
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse  
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well  
CC as oligonucleotides that specifically bind the Enhancer I region of HBV  
CC DNA. The nucleic acids may be used to modulate the expression of HBV  
CC genes and HBV viral replication. Also disclosed is a method for screening  
CC compounds and/or potential therapies directed against HBV, and compounds  
CC that modulate the expression and/or replication of HCV. The compounds and  
CC methods of the invention are useful for the treatment of degenerative and  
CC disease states related to HBV and HCV infection, replication and gene  
CC expression such as cirrhosis, liver failure, and hepatocellular  
CC carcinoma. The present sequence represents a substrate for one of the HBV  
CC ribozyme, inozyme, G-cleaver, zinzyme, DNazyme or amberszyme sequences  
CC disclosed in the present invention  
XX  
SQ Sequence 17 BP; 0 A; 2 C; 3 G; 0 T; 12 U; 0 Other;  
Query Match 0.7%; Score 14.4; DB 1; Length 17;  
Best Local Similarity 25.0%; Pred. No. 1.6e+02;  
Matches 4; Conservative 11; Mismatches 1; Indels 0; Gaps 0;  
QY 908 TTTTCTTTGTCCTTTG 923  
|:::|:::|:::|:::|  
Db 1 UUUUUUUUUUUUUU 16  
RESULT 229  
ADA50406  
ID ADA50406 standard; DNA; 17 BP.  
XX ADA50406;  
XX  
XX ADA50406;  
XX  
DT 20-NOV-2003 (first entry)  
XX  
XX Thermus scotoductus nucleic acid polymerase PCR primer SEQ ID NO:30.  
DE Thermus scotoductus; enzyme; Thermus scotoductus; DNA polymerase;  
XX nucleic acid polymerase; salt tolerance; thermostability; PCR primer; ss.  
XX  
OS Synthetic.  
OS Thermus scotoductus.  
XX  
XX WO2003066804-A2.  
XX  
XX 14-AUG-2003.  
PD  
XX 13-SEP-2002; 2002WO-US029102.  
XX  
XX 14-SEP-2001; 2001US-0322218P.  
PR 30-NOV-2001; 2001US-0334489P.  
XX  
XX (APPL-) APPLERA CORP.  
PA (BOLC-) BOLCHAKOVA E V.

PA (ROZZ/) ROZZELLE J E.  
XX Bolchakova EV, Rozzelle JE;  
XX WPI; 2003-663590/62.  
XX  
XX New nucleic acid encoding a Thermus scotoductus strain X-1, ATCC Deposit  
PT No. 27978 nucleic acid polymerase, useful for producing nucleic acid  
PT polymerases having e.g., improved sequence discrimination or better salt  
PT tolerance.  
XX  
XX Example 1; Page 79; 179pp; English.  
XX  
XX The present invention describes isolated nucleic acids encoding nucleic  
CC acid polymerases from Thermus scotoductus. Also described: (1) an  
CC isolated nucleic acid (I) encoding a nucleic acid polymerase from Thermus  
CC scotoductus strain X-1, ATCC Deposit No. 27978; (2) an isolated DNA  
CC polymerase polypeptide from Thermus scotoductus strain X-1, ATCC Deposit  
CC No. 27978; (3) an isolated nucleic acid (II) comprising any of a set of  
CC 12 nucleic acid sequences (S1, see ADA50425 to ADA50436) which encodes a  
CC nucleic acid polymerase; (4) an isolated nucleic acid (III) encoding a  
CC nucleic acid polymerase comprising any of a set of 16 amino acid  
CC sequences (S2, see ADA50389 to ADA50404); (5) isolated nucleic acid  
CC polymerases comprising any of amino acid sequences S2; (6) vectors  
CC comprising (I), (II), or (III), and especially expression vectors in  
CC which the nucleic acid polymerase gene is operably linked to a promoter;  
CC (7) a host cell comprising an isolated nucleic acid molecule encoding a  
CC nucleic acid polymerase from Thermus scotoductus strain X-1, ATCC Deposit  
CC No. 27978; (8) a host cell comprising (I) or (II); (9) a kit comprising a  
CC container containing a nucleic acid polymerase comprising any of amino  
CC acid sequences S2; (10) preparing (M1) a nucleic acid polymerase  
CC comprising any of amino acid sequences S2 by incubating a host cell  
CC comprising an encoding nucleic acid under conditions sufficient for RNA  
CC transcription and translation; (11) a nucleic acid polymerase prepared by  
CC M1; (12) synthesizing DNA (M2) comprising contacting a polypeptide  
CC comprising any of amino acid sequences S2 with a DNA under conditions  
CC sufficient to permit DNA polymerization; (13) a method (M3) for  
CC thermocyclic amplification of nucleic acid; and (14) a method (M4) of  
CC primer extension. The nucleic acid is useful for producing nucleic acid  
CC polymerases having improved sequence discrimination, better salt  
CC tolerance or varying degrees of thermostability with applications e.g. in  
CC PCR and DNA sequencing. The present sequence represents a PCR primer for  
CC Thermus scotoductus nucleic acid polymerase, which is used in an example  
XX from the present invention.  
XX  
XX Sequence 17 BP; 3 A; 11 C; 1 G; 2 T; 0 U; 0 Other;  
SQ  
Query Match 0.7%; Score 14.4; DB 1; Length 17;  
Best Local Similarity 93.8%; Pred. No. 1.6e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 1127 CCACCTTCACCTCCAG 1142  
DB ||||| ||||| |||||  
2 CCACCTTCACCTCCAG 17  
RESULT 230  
ACC79937  
ID ACC79937 standard; DNA; 17 BP.  
XX  
XX ACC79937;  
XX  
XX 09-SEP-2003 (first entry)  
XX  
XX Thermus oshimai nucleic acid polymerase PCR primer SEQ ID NO:30.  
XX  
XX Thermus oshimai; nucleic acid polymerase; enzyme; DNA sequencing;  
KW amplification; reverse transcription; RNA amplification;  
KW primer extension; PCR primer; ss.  
XX  
XX Thermus oshimai.  
OS Synthetic.  
XX

PN WO2003048310-A2.  
XX  
XX 12-JUN-2003.  
XX  
XX 22-NOV-2002; 2002WO-US037764.  
XX  
XX 30-NOV-2001; 2001US-0334798P.  
XX  
XX (APPL-) APPLERA CORP.  
XX  
XX Bolchakova E, Rozzelle J;  
PI WPI; 2003-505286/47.  
XX  
XX New nucleic acid, useful for DNA sequencing or amplification, reverse  
PT transcription, RNA amplification or primer extension reactions.  
PT  
XX Example 1; Page 50; 64pp; English.  
PS  
XX The present invention describes a nucleic acid (I) encoding a nucleic  
CC acid polymerase or a derivative nucleic acid polymerase with a mutation  
CC that decreases 5-3' exonuclease activity or that reduces discrimination  
CC against dideoxynucleotide triphosphates. Also described: (1) a vector  
CC comprising the nucleic acid (I); (2) a host cell comprising the nucleic  
CC acid (I); (3) a nucleic acid polymerase or its derivative; (4) a kit  
CC comprising a container containing the nucleic acid polymerase of (3); (5)  
CC making the nucleic acid polymerase of (3); (6) synthesizing a DNA; (7)  
CC thermocyclic amplification of nucleic acid; and (8) primer extending a  
CC DNA. The nucleic acid (I) is useful for DNA sequencing or amplification,  
CC reverse transcription, RNA amplification or primer extension reactions.  
CC The present sequence represents a PCR primer for Thermus oshimai nucleic  
CC acid polymerase, which is used in an example from the present invention  
XX  
XX Sequence 17 BP; 3 A; 11 C; 1 G; 2 T; 0 U; 0 Other;  
SQ  
Query Match 0.7%; Score 14.4; DB 1; Length 17;  
Best Local Similarity 93.8%; Pred. No. 1.6e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 1127 CCACCTTCACCTCCAG 1142  
DB ||||| ||||| |||||  
2 CCACCTTCACCTCCAG 17  
RESULT 231  
ADB44463/C  
ID ADB44463 standard; DNA; 17 BP.  
XX  
XX ADB44463;  
XX  
XX 18-DEC-2003 (first entry)  
XX  
XX Tumour suppression/reversion associated nucleotide #4786.  
XX  
XX cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;  
KW primer; probe; tumour suppression; tumour reversion; apoptosis;  
KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;  
KW diagnosis.  
XX  
XX Homo sapiens.  
OS  
XX WO2003040369-A2.  
PN  
XX 15-MAY-2003.  
XX  
XX 17-SEP-2002; 2002WO-IB004219.  
XX  
XX 17-SEP-2001; 2001FR-00011981.  
XX  
XX (MOLE-) MOLECULAR ENGINES LAB.  
XX  
XX Telerman A, Amson R, Tuijnder M;  
PI  
XX



DR WPI; 2003-441574/41.

PT New nucleic acid encoding human prostate membrane-specific antigen,

PT useful e.g. for treatment of tumors and viral infection, also related

XX polypeptide and antibodies.

XX

PS Disclosure; Page 591; 771pp; French.

XX

CC The invention relates to the isolation of 6327 nucleotide sequences,

CC fragments of at least 15 consecutive nucleotides of these nucleotides, a

CC sequence having at least 80% identity, after optimal alignment, with the

CC nucleotides, a sequence that hybridizes under stringent conditions with

CC the nucleotides, or the complement, or corresponding RNA, of the

CC nucleotides. The nucleotides are used as probes or primers for detecting,

CC identifying, quantifying and/or amplifying nucleic acids, as in vitro

CC sense and antisense sequences, of nucleotides involved in tumour

CC suppression or reversion, apoptosis and or viral resistance, to produce

CC recombinant polypeptides, and to prepare transgenic animals, as

CC experimental models. The nucleotides (also vectors containing them and

CC cells containing the vectors), the encoded polypeptides and antibodies

CC (Ab) against the polypeptide are useful for prevention and/or treatment

CC of viral infections or diseases characterized by development of tumours

CC or cell degeneration (e.g. Alzheimer's disease or schizophrénia).

CC Analysis of the expression of the nucleotides can be used for diagnosis

CC and/or prognosis of these diseases. The nucleotides and polypeptides can

CC also be used to screen for their specific interactive molecules,

CC potentially useful for treating diseases associated with abnormal

CC expression of the nucleotides.

XX

SQ Sequence 17 BP; 3 A; 4 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.4; DB 1; Length 17;

Best Local Similarity 93.8%; Pred. No. 1.6e+02;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 881 GCACACAGTCTGT 896

Db 17 GCACACAGTCTGTAT 2

RESULT 232

AAQ73381/c

ID AAQ73381 standard; DNA; 18 BP.

AC AAQ73381;

XX

XX

DT 25-MAR-2003 (revised)

DT 02-MAY-1995 (first entry)

XX

XX

DE Anti-HSV-1 G4 oligo #5653.

XX

XX

XX Hybridise; herpes simplex virus; HSV; open reading frame;

KW translation initiation site; coding region; 5' UTR; ss.

KW

XX

OS Synthetic.

XX

XX WO9419945-A1.

PN

XX

PD 15-SEP-1994.

XX

XX

PF 07-MAR-1994; 94WO-US002471.

XX

XX

PR 12-MAR-1993; 93US-00031147.

XX

XX

PA (ISIS-) ISIS PHARM INC.

XX

XX Draper KG, Crooke ST, Mirabelli CK, Ecker DJ, Hanecak R;

PI Anderson KP, Brown-Driver VL, Wyatt JR;

XX

XX WPI; 1994-302552/37.

DR

XX New oligonucleotide(s) hybridising with DNA or RNA of herpesvirus gene -

PT are used in the treatment and diagnosis of herpes simplex virus,

PT

PT cytomagalovirus, Epstein Barr virus and varicella zoster infections.

XX

PS Claim 12; Page 36; 72pp; English.

XX

CC The sequences given in AAQ73325-81 represent oligonucleotides which

CC hybridise specifically with DNA or RNA from a herpes virus gene

CC corresponding to one of the open reading frames UL5, -8, -9, -20, -27-

CC 29, -30, -42, -52 or 1E175 of herpes simplex virus type 1 (HSV-1). These

CC oligos pref. hybridise with a translation initiation site, a coding

CC region or a 5' untranslated region. These oligos may be used in

CC compositions for the treatment and diagnosis of herpes viral infection,

CC by contacting the virus or the animal, or its cells, tissues or body

CC fluids with the oligo. (Updated on 25-MAR-2003 to correct PN field.)

XX

SQ Sequence 18 BP; 0 A; 0 C; 12 G; 6 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.4; DB 1; Length 18;

Best Local Similarity 93.8%; Pred. No. 1.9e+02;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1251 CCCCATCCCAACCCC 1266

Db 18 CCCCAACCCCAACCCC 3

RESULT 233

AAQ61992/c

ID AAQ61992 standard; DNA; 18 BP.

AC AAQ61992;

XX

XX

DT 25-MAR-2003 (revised)

DT 04-NOV-1994 (first entry)

XX

XX

DE Guanine quartet containing oligomer, #3.

XX

XX

KW Inhibition; replication; herpes simplex virus; HSV; HIV; retard;

KW human cytomegalovirus; influenza virus; inflammation; telomere length;

KW neurological disorders; phospholipase A2 activity; hyperproliferation;

KW malignancy; cardiovascular disease; snake bite; malignancy; aging; ss.

XX

OS Synthetic.

XX

XX

XX Key Location/Qualifiers

FT misc\_feature 1..18

FT /\*tag= a

FT /note= "Phosphorothionate intersugar linkages"

XX

PN WO9408053-A1.

XX

XX

PD 14-APR-1994.

XX

XX

PF 29-SEP-1993; 93WO-US009297.

XX

XX

PR 29-SEP-1992; 92US-00954185.

XX

XX

PA (ISIS-) ISIS PHARM INC.

XX

XX Hanecak RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;

PI Ecker DJ, Vickers TA, Wyatt JR, Imbach JL;

XX

XX WPI; 1994-135613/16.

DR

XX New modified oligo-nucleotide contg guanine quartet - inhibits activity

PT of viruses, e.g. HIV, and phospholipase A2 and modulates telomere length

PT of chromosomes.

XX

XX Disclosure; Page 105; 144pp; English.

XX

XX The sequences given in AAQ61990-2001 are oligonucleotides which contain

CC G4 or G3 stretches and which may be used for inhibiting replication of

CC herpes simplex virus (HSV), activity of HIV, human cytomegalovirus or

CC influenza virus, or for treating inflammatory and neurological disorders

CC

CC caused by phospholipase A2 activity in cases of hyper- proliferation,  
 CC malignancy, cardiovascular disease and snake bite. Oligonucleotides such  
 CC as these, may be used for inhibiting division of malignant cells by  
 CC modulating telomere length, which may also retard aging. (Updated on 25-  
 CC MAR-2003 to correct FN field.)

SQ Sequence 18 BP; 0 A; 0 C; 12 G; 6 T; 0 U; 0 Other;  
 Query Match 0.7%; Score 14.4; DB 1; Length 18;  
 Best Local Similarity 93.8%; Pred. No. 1.9e+02;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1251 CCCCATCCCCAACCCC 1266  
 DB 18 CCCCAACCCCAACCCC 3

RESULT 234  
 AAQ61897/c  
 ID AAQ61897 standard; DNA; 18 BP.

AC AAQ61897;

XX 25-MAR-2003 (revised)  
 DT 04-NOV-1994 (first entry)

XX HSV replication inhibiting oligomer, ISIS no 5653.

XX Inhibition; replication; herpes simplex virus; HSV; HIV;

KW human cytomegalovirus; influenza virus; inflammation;

KW neurological disorders; phospholipase A2 activity; hyperproliferation;

KW malignancy; cardiovascular disease; snake bite; malignancy;

KW telomere length; retard; aging; ss.

XX Synthetic.

XX Key Location/Qualifiers  
 FH misc\_feature 1..18

FT /\*tag= a  
 FT /note= "Phosphorothionate intersugar linkages"

XX WO9408053-A1.

XX 14-APR-1994.

XX 29-SEP-1993; 93WO-US009297.

XX 29-SEP-1992; 92US-00954185.

XX (ISIS-) ISIS PHARM INC.

XX Hanecak RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;  
 PI Ecker DJ, Vickers TA, Wyatt JR, Imbach JL;

XX WPI; 1994-135613/16.

XX New modified oligo-nucleotide contg guanine quartet - inhibits activity  
 PT of viruses, e.g. HIV, and phospholipase A2 and modulates telomere length  
 PT of chromosomes.

XX Claim 5; Page 19; 144pp; English.

XX The sequences given in AAQ61825-50 and AAQ61886-906 are oligonucleotides  
 CC which contain a G4 or two G3 stretches and which may be used for  
 CC inhibiting replication of herpes simplex virus (HSV). Oligonucleotides  
 CC such as these may also be used for inhibiting activity of HIV, human  
 CC cytomegalovirus or influenza virus, or for treating inflammatory and  
 CC neurological disorders caused by phospholipase A2 activity in cases of  
 CC hyperproliferation, malignancy, cardiovascular disease and snake bite.  
 CC They may also be used for inhibiting division of malignant cells by  
 CC modulating telomere length, which may also retard aging. (Updated on 25-  
 CC MAR-2003 to correct FN field.)

SQ Sequence 18 BP; 0 A; 0 C; 12 G; 6 T; 0 U; 0 Other;  
 Query Match 0.7%; Score 14.4; DB 1; Length 18;  
 Best Local Similarity 93.8%; Pred. No. 1.9e+02;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1251 CCCCATCCCCAACCCC 1266  
 DB 18 CCCCAACCCCAACCCC 3

RESULT 235

AAQ61913/c

ID AAQ61913 standard; DNA; 18 BP.

XX AC AAQ61913;

XX 25-MAR-2003 (revised)

DT 04-NOV-1994 (first entry)

XX HIV replication inhibiting oligomer, ISIS no 5666.

XX Inhibition; replication; herpes simplex virus; HSV; HIV;

KW human cytomegalovirus; influenza virus; inflammation;

KW neurological disorders; phospholipase A2 activity; hyperproliferation;

KW malignancy; cardiovascular disease; snake bite; malignancy;

KW telomere length; retard; aging; ss.

XX Synthetic.

XX Key Location/Qualifiers

FT misc\_feature 1..18

FT /\*tag= a

FT /note= "Phosphorothionate intersugar linkages"

XX WO9408053-A1.

XX 14-APR-1994.

XX 29-SEP-1993; 93WO-US009297.

XX 29-SEP-1992; 92US-00954185.

XX (ISIS-) ISIS PHARM INC.

XX Hanecak RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;

PI Ecker DJ, Vickers TA, Wyatt JR, Imbach JL;

XX WPI; 1994-135613/16.

XX New modified oligo-nucleotide contg guanine quartet - inhibits activity  
 PT of viruses, e.g. HIV, and phospholipase A2 and modulates telomere length  
 PT of chromosomes.

XX Disclosure; Page 23; 144pp; English.

XX The sequences given in AAQ61913-16 are oligonucleotides which contain a  
 CC G4 stretch and which may be used for inhibiting replication of human  
 CC immunodeficiency virus (HIV). Oligonucleotides such as these may also be  
 CC used for inhibiting activity of HSV, human cytomegalovirus or influenza  
 CC virus, or for treating inflammatory and neurological disorders caused by  
 CC phospholipase A2 activity in cases of hyper- proliferation, malignancy,  
 CC cardiovascular disease and snake bite. They may also be used for  
 CC inhibiting division of malignant cells by modulating telomere length,  
 CC which may also retard aging. (Updated on 25-MAR-2003 to correct PN  
 CC field.)

XX Sequence 18 BP; 0 A; 0 C; 12 G; 6 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.4; DB 1; Length 18;

Best Local Similarity 93.8%; Pred. No. 1.9e+02;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```
QY 1251 CCCATCCCCAACCCC 1266
      ||||| ||||| |||||
      18 CCCCAACCCCAACCCC 3
      ||||| ||||| |||||

RESULT 236
AAQ97983/C
ID AAQ97983 standard; DNA; 18 BP.
XX
AC AAQ97983;
XX
DT 25-MAR-2003 (revised)
DT 19-OCT-1995 (first entry)
XX
DE Peptide nucleic acid oligomer targetting HIV gene.
XX
KW Peptide nucleic acid; PNA; HIV; human immunodeficiency virus; AIDS;
KW antiviral; antisense; triple helix; ss.
XX
OS Synthetic.
XX
PH Key Location/Qualifiers
FT misc_feature 1..18
FT /*tag= a
FT subunits are composed of N-acetyl N-(2-aminoethyl)glycine
FT peptide residues, the nucleobase being attached
FT covalently to the acetyl group and the peptide linkage
FT being formed by condensation of the glycine carboxy group
FT of one residue with the amino group of the 2-aminoethyl
FT moiety in the next residue"
XX
PN WO9504068-A1.
XX
XX 09-FEB-1995.
XX
XX 28-JUL-1994; 94WO-US008517.
XX
XX 29-JUL-1993; 93US-00099718.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Ecker DJ;
XX
XX WPI; 1995-082179/11.
XX
XX Oligomer hybridisable to HIV sequence and contg. peptide nucleic acid
XX sub:unit - binds in complementary manner to DNA and RNA, and useful for
XX modulating HIV viral activity, e.g. in treating AIDS.
XX
XX Claim 2; Page 176; 186pp; English.
XX
XX New peptide nucleic acid (PNA) oligomers are provided which (a) consist
XX of naturally occurring nucleobases covalently bound to a polyamide
XX backbone and (b) hybridise to the translation initiation AUG region, 5'
XX untranslated region (5' UTR), 3' untranslated region (3' UTR), splice
XX junctions or coding sequence of a human immunodeficiency virus gene
XX chosen from env, gag, pol, rev and tat. The PNAs can be used to target
XX RNA and single stranded DNA (ssDNA) to produce antisense-type gene
XX regulation moieties. They have utility as gene-targeted drugs for
XX modulating HIV processes. Hence they can be used to treat AIDS and other
XX viral infections. They are also useful in diagnostic applications and as
XX research tools. PNA oligomers have high affinity for complementary single
XX stranded DNA. They are also able to form triple helices in which a first
XX PNA strand binds with RNA or ssDNA and a second PNA strand binds with the
XX resulting double helix or with the first PNA strand. The PNAs possess no
XX significant charge and are water soluble, which facilitates cellular
XX uptake. Further, since they contain amides of non-biological amino acids,
XX they are biostable and resistant to enzymatic degradation by proteases.
XX The present sequence is a specifically claimed PNA sequence (represented
XX by the sequence of nucleobases) targetting HIV genes. (Updated on 25-MAR-
XX 2003 to correct PN field.)

SQ Sequence 18 BP; 0 A; 0 C; 12 G; 6 T; 0 U; 0 Other;
      Query Match 0.7%; Score 14.4; DB 1; Length 18;
      Best Local Similarity 93.8%; Pred. No. 1.9e+02;
      Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1251 CCCATCCCCAACCCC 1266
      ||||| ||||| |||||
      18 CCCCAACCCCAACCCC 3
      ||||| ||||| |||||

RESULT 237
ADCT0167/C
ID ADC70167 standard; DNA; 18 BP.
XX
AC ADC70167;
XX
DT 18-DEC-2003 (first entry)
DE
DE Primer oligo used for analysing CpG islands in genomic DNA (SeqID 657).
XX
XX PCR; primer: ss; lung cell proliferative disorder; CpG dinucleotide;
XX adenocarcinoma; squamous cell carcinoma; cytostatic; probe; PNA-oligomer;
XX cytosine methylation state.
XX
XX Unidentified.
XX
XX WO2003052135-A2.
XX
XX 26-JUN-2003.
XX
XX 10-DEC-2002; 2002WO-EP014026.
XX
XX 14-DEC-2001; 2001DE-01061625.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Burger M, Field JK, Genc B, Liloglou T, Lipscher E, Maier S;
XX Nimmrich I;
XX
XX WPI; 2003-533029/50.
XX
XX Detecting and differentiating cytosine methylation state of genomic DNA,
XX useful for diagnosing, treating prognosticating and/or monitoring lung
XX cell proliferative disorders e.g. adenocarcinoma and squamous cell
XX carcinoma.
XX
XX Claim 15; SEQ ID NO 657; 58pp; English.
XX
XX This invention relates to a novel method for detecting and
XX differentiating between lung cell proliferative disorders associated with
XX at least one gene and/or their regulatory regions. Specifically, it
XX refers to a method comprising contacting a target nucleic acid in a
XX biological sample with at least one reagent, wherein the reagent is able
XX to distinguish between methylated and non-methylated CpG dinucleotides
XX present in the target DNA. As such, it is possible to further
XX differentiate and diagnose medical conditions including adenocarcinoma
XX and squamous cell carcinoma, and their respective adjacent lung tissue.
XX The present invention describes cytostatic oligomers and PNA-oligomers
XX that are useful as probes for determining the cytosine methylation state
XX or single nucleotide polymorphisms (SNPs) of the target sequence. This
XX oligonucleotide sequence is a primer oligomer used for the analysis of
XX CpG positions within genomic DNA, used in an exemplification of the
XX invention.

SQ Sequence 18 BP; 3 A; 0 C; 10 G; 5 T; 0 U; 0 Other;
      Query Match 0.7%; Score 14.4; DB 1; Length 18;
      Best Local Similarity 93.8%; Pred. No. 1.9e+02;
      Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1253 CCATCCCAACCCCT 1268
      ||||| ||||| |||||
```

Db 17 CCATCCCCAACCCCTCT 2

RESULT 238  
AAA38182  
ID AAA38182 standard; DNA; 19 BP.  
XX  
XX AAA38182;  
XX AC  
XX 15-SEP-2003 (revised)  
DT 01-SEP-2000 (first entry)  
XX  
DE Primer used in the analysis of a BVDV genome fragment.  
XX  
XX Primer; bovine viral diarrhoea virus; BVDV; nucleic acid analysis;  
KW diagnosis; pathological organism; detect; ss.  
KW  
XX Pestivirus type 1.  
OS  
XX WO200020628-A1.  
PN  
XX 13-APR-2000.  
XX  
XX 01-OCT-1999; 99WO-CA000915.  
PF  
XX 01-OCT-1998; 98US-00165264.  
PR  
XX (BIOI-) BIO-ID DIAGNOSTIC INC.  
PA  
XX Vinayagamoorthy T;  
PI  
XX WPI; 2000-303800/26.  
DR  
XX Nucleic acid analysis methods for simultaneously analyzing multiple  
PT nucleic acid regions for diagnosis and differentiation of pathological  
PT organisms comprises sequencing the nucleic acids in the reaction mixture.  
PT  
XX Example 2; Page 23; 36pp; English.  
PS  
XX This sequence represents a primer used in the analysis of a fragment of  
CC the bovine viral diarrhoea virus (BVDV) genome. The primer is used to  
CC illustrate the nucleic acid analysis methods of the invention. The  
CC methods are used for sequencing a nucleic acid in a mixture comprising  
CC two nucleic acid target sequences. The methods are used for  
CC simultaneously analysing multiple nucleic acid regions in a single  
CC reaction. This can allow the reliable diagnosis and differentiation of  
CC pathological organisms. The methods can be adapted to use a series of  
CC primers with additional sequences which allows the size of the amplified  
CC region to be increased. The technique is especially useful when the usual  
CC sequence of the region to be detected is known and the assay is being  
CC carried out to confirm its presence e.g. to rule out a falsely positive  
CC amplification reaction or to distinguish subsets of an organism of  
CC interest or allelic forms of a gene associated with a disease or  
CC predisposition to a disease. (Updated on 15-SEP-2003 to standardise OS  
CC field)  
XX  
XX Sequence 19 BP; 4 A; 7 C; 4 G; 4 T; 0 U; 0 Other;  
SQ

Query Match 0.7%; Score 14.4; DB 1; Length 19;  
Best Local Similarity 93.8%; Pred. No. 2.3e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1198 GCACACCCCTATCAGG 1213  
||| |||||  
Db 4 GCAGCACCCCTATCAGG 19

RESULT 239  
AAA85677/c  
ID AAA85677 standard; DNA; 19 BP.  
XX  
XX AAA85677;  
XX

DT 04-DEC-2000 (first entry)  
XX  
XX Cyclin B1 ribozyme binding site #6.  
XX  
KW Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.  
XX  
XX Mammalia.  
XX  
XX WO200032765-A2.  
PN  
XX 08-JUN-2000.  
PD  
XX  
XX 06-DEC-1999; 99WO-US028772.  
PF  
XX 04-DEC-1998; 98US-0110954P.  
PR  
XX (IMMU-) IMMUSOL INC.  
PA  
XX Tritz R, Welch PJ, Barber JR, Robbins JM;  
PI WPI; 2000-412314/35.  
PN  
XX  
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves  
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,  
PT PCNA and Cyclin B1.  
PT  
XX Disclosure; Page 96; 109pp; English.  
PS  
XX The present invention relates to a hairpin or hammerhead ribozyme,  
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase  
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.  
CC Representative examples of ribozyme recognition sites are given in  
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for  
CC inhibiting restenosis by introduction of the ribozyme into cells. The  
CC ribozyme is resistant to endonuclease activity and hence is efficient in  
CC restenosis treatment  
XX  
XX Sequence 19 BP; 0 A; 7 C; 4 G; 8 T; 0 U; 0 Other;  
SQ

Query Match 0.7%; Score 14.4; DB 1; Length 19;  
Best Local Similarity 93.8%; Pred. No. 2.3e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 733 GAGAACACGACACCG 748  
||||| |||||  
Db 19 GAGAACACGACACCG 4

RESULT 240  
AAH60839/c  
ID AAH60839 standard; DNA; 19 BP.  
XX  
XX AAH60839;  
AC  
XX 10-SEP-2001 (first entry)  
DT  
XX  
XX Cyclin B1 ribozyme binding site SEQ ID NO:3263.  
DE  
XX Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;  
KW recognition site; target; ribozyme binding site; eye disease; vulnary;  
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;  
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;  
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;  
KW antiproliferative; dermatological; antiseborrheic; antidiabetic; virucide;  
KW antipsoriasis; ophthalmological; keratolytic; gene therapy; viral wart;  
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;  
KW basal cell carcinoma; seborrhic wart; vitreoretinopathy; scar;  
KW sickle cell retinopathy; ss.  
XX  
XX Homo sapiens.  
OS  
XX Synthetic.  
XX  
XX WO200130362-A2.  
PN

XX PD 03-MAY-2001.  
 XX PF 26-OCT-2000; 2000WO-US029500.  
 XX PR 26-OCT-1999; 99US-0161532P.  
 XX PA (IMMU-) IMMUSOL INC.  
 XX PI Robbins JM, Tritz R;  
 XX DR WPI; 2001-300427/31.  
 XX PT Treating proliferative skin or eye diseases and scarring, using ribozymes  
 PT that cleave RNA encoding cytokines involved in inflammation, matrix  
 PT metalloproteinases, growth factors and cell-cycle dependent kinases.  
 XX Example 1; Page 309; 408pp; English.  
 XX The present invention describes a method for treating a proliferative  
 CC skin or eye disease and scarring. The method involves administering a  
 CC ribozyme (I) which cleaves RNA encoding a cytokine involved in  
 CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle  
 CC dependent kinase, growth factor or a reductase, or administering a  
 CC nucleic acid molecule (II) comprising a promoter operably linked to a  
 CC nucleic acid segment encoding (I). (I) can have antiproliferative,  
 CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,  
 CC ophthalmological, vulvar, keratolytic and virucide activities, and  
 CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used  
 CC in gene therapy. (I) and (II) are useful for treating proliferative skin  
 CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,  
 CC squamous or basal cell carcinoma and viral or seborrheic wart. They can  
 CC also be used for treating proliferative eye diseases such as diabetic  
 CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of  
 CC prematurity and retinal detachment, and for treating and preventing  
 CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn  
 CC scar. AAH57577 to AAH62099 represent sequences used in the  
 CC exemplification of the present invention  
 XX SQ Sequence 19 BP; 0 A; 7 C; 4 G; 8 T; 0 U; 0 Other;  
 Query Match 0.7%; Score 14.4; DB 1; Length 19;  
 Best Local Similarity 93.8%; Pred. No. 2.3e+02;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 Qy 733 GAGAAACAGAACACCG 748  
 |||||  
 Db 19 GAGAGACAGAACACCG 4  
 RESULT 241  
 ACA98826  
 ID ACA98826 standard; DNA; 19 BP.  
 XX AC ACA98826;  
 XX OS Homo sapiens.  
 XX WO200299099-A2.  
 XX PD 12-DEC-2002.  
 XX DE Human CYP2C8 SNP detection PCR primer #266.  
 XX KW Cytochrome P450 polypeptide 2C8; CYP2C8; arachidonic acid metabolism;  
 KW cancer; cardiovascular disease; cytostatic; cardiovascular; gene therapy;  
 KW single nucleotide polymorphism detection; SNP detection; PCR; primer; ss.  
 XX OS Homo sapiens.  
 XX WO200299099-A2.  
 XX PD 12-DEC-2002.  
 XX PF 31-MAY-2002; 2002WO-EP006000.  
 XX PR 01-JUN-2001; 2001EP-00112899.

XX PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.  
 XX PI Penger A, Sprenger R, Brinkmann U;  
 XX DR WPI; 2003-167344/16.  
 XX New polymorphic variants of the gene encoding Cytochrome P450 polypeptide  
 PT 2C8 (CYP2C8), useful for diagnosing or treating a disease, e.g.  
 PT arachidonic acid metabolism, cancer or cardiovascular diseases.  
 XX Example 2; Page 53; 178pp; English.  
 XX The invention describes a new polynucleotide comprises a polynucleotide:  
 CC (a) having any of 101 nucleic acid sequences with 18-19 bp fully defined  
 CC in the specification; (b) encoding any of seven polypeptides having 7  
 CC amino acids, or a polypeptide with 3 amino acids; (c) capable of  
 CC hybridizing to a Cytochrome P450 polypeptide 2C8 (CYP2C8) gene; (d)  
 CC encoding a molecular CYP2C8 variant polypeptide or its fragment. The  
 CC polynucleotide, gene, vector, polypeptide or antibody is useful for  
 CC diagnosing or treating a disease, for preparing a diagnostic composition  
 CC for diagnosing a disease, or for preparing a pharmaceutical composition  
 CC for treating a disease. This disease includes arachidonic acid  
 CC metabolism, cancer or cardiovascular diseases. This sequence represents a  
 CC primer used to isolate regions of the human cytochrome P450 polypeptide  
 CC 2C8 gene (CYP2C8) in order to identify the single nucleotide polymorphism  
 CC (SNP) in that region of different individuals useful in disease diagnosis  
 XX SQ Sequence 19 BP; 3 A; 6 C; 3 G; 6 T; 0 U; 1 Other;  
 Query Match 0.7%; Score 14.4; DB 1; Length 19;  
 Best Local Similarity 83.3%; Pred. No. 2.3e+02;  
 Matches 15; Conservative 1; Mismatches 2; Indels 0; Gaps 0;  
 Qy 896 TGCCCCCTGGTCATTTTCT 913  
 |||||  
 Db 1 TGACCCTGGTCATTTTCT 18  
 RESULT 242  
 ACA98826/C  
 ID ACA98829 standard; DNA; 19 BP.  
 XX AC ACA98829;  
 XX OS Homo sapiens.  
 XX WO200299099-A2.  
 XX PD 12-DEC-2002.  
 XX PF 31-MAY-2002; 2002WO-EP006000.  
 XX PR 01-JUN-2001; 2001EP-00112899.  
 XX PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.  
 XX PI Penger A, Sprenger R, Brinkmann U;  
 XX DR WPI; 2003-167344/16.  
 XX New polymorphic variants of the gene encoding Cytochrome P450 polypeptide  
 PT 2C8 (CYP2C8), useful for diagnosing or treating a disease, e.g.  
 PT arachidonic acid metabolism, cancer or cardiovascular diseases.  
 XX

Example 2; Page 53; 178pp; English.

PS The invention describes a new polynucleotide comprises a polynucleotide:  
 XX (a) having any of 101 nucleic acid sequences with 18-19 bp fully defined  
 CC in the specification; (b) encoding any of seven polypeptides having 7  
 CC amino acids, or a polypeptide with 3 amino acids; (c) capable of  
 CC hybridising to a Cytochrome P450 polypeptide 2C8 (CYP2C8) gene; (d)  
 CC encoding a molecular CYP2C8 variant polypeptide or its fragment. The  
 CC polynucleotide, gene, vector, polypeptide or antibody is useful for  
 CC diagnosing or treating a disease, for preparing a diagnostic composition  
 CC for diagnosing a disease, or for preparing a pharmaceutical composition  
 CC for treating a disease. This disease includes arachidonic acid  
 CC metabolism, cancer or cardiovascular diseases. This sequence represents a  
 CC primer used to isolate regions of the human cytochrome P450 polypeptide  
 CC 2C8 gene (CYP2C8) in order to identify the single nucleotide polymorphism  
 CC (SNP) in that region of different individuals useful in disease diagnosis

XX Sequence 19 BP; 6 A; 3 C; 6 G; 3 T; 0 U; 1 Other;

Query Match 0.7%; Score 14.4; DB 1; Length 19;  
 Best Local Similarity 83.3%; Pred. No. 2.3e+02;  
 Matches 15; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 896 TGGCCCTGGTCATTTCCT 913  
 |||||:|||||  
 Db 19 TGACCCCTGGYCACTTCT 2

RESULT 243

AAAT87852  
 ID AAT87852 standard; DNA; 20 BP.

XX AC AAT87852;

DT 25-MAR-2003 (revised)

DT 20-APR-1998 (first entry)

XX Human HCV RNA anti-sense PCR primer RB-6B.

XX Hepatitis C virus; HCV; detection; diagnostic; single stranded;

KW double stranded; separation; ss.

XX Synthetic.

OS Hepatitis C virus; Virus.

XX WO9737040-A2.

XX 09-OCT-1997.

XX 03-APR-1997; 97WO-NL000167.

XX 03-APR-1996; 96NL-01002781.

XX (AMST-) AMSTERDAM SUPPORT DIAGNOSTICS BV.

XX Goudsmit J, Beld MGHM, Sol CVA, Boom WR;

XX WPI; 1997-503120/46.

XX Separation of single and double stranded hepatitis C virus RNA - using  
 PT liquid comprising chaotropic agent and nucleic acid binding phase,  
 PT particularly silica particles.  
 XX Disclosure; Page 15; 41pp; English.

XX PCR primers AAT87852 and AAT87853 are used to amplify nucleic acid from  
 CC the Hepatitis C Virus (HCV) for use in a novel method for separating  
 CC single stranded HCV RNA from double stranded HCV RNA. This method  
 CC involves contacting the sample with a liquid comprising a chaotropic  
 CC agent and a nucleic acid binding solid phase, having a composition so  
 CC that double stranded nucleic acid binds the solid phase and single  
 CC stranded nucleic acid does not, and separating the solid phase from the  
 CC supernatant. This method can be used to separate and detect causative

CC agents of hepatitis from each other and host material. (Updated on 25-MAR  
 CC -2003 to correct PR field.)

XX Sequence 20 BP; 4 A; 8 C; 4 G; 3 T; 0 U; 1 Other;

Query Match 0.7%; Score 14.4; DB 1; Length 20;  
 Best Local Similarity 83.3%; Pred. No. 2.7e+02;  
 Matches 15; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 1196 TGGCACCACCTATCAGG 1213  
 |||||:|||||  
 Db 3 TCGCMGCACCTATCAGG 20

RESULT 244

AAV19519/c

ID AAV19519 standard; DNA; 20 BP.

XX AC AAV19519;

DT 16-JUL-1998 (first entry)

XX Retroviral DNA base sequences amplifying primer M29.

XX Retrovirus; AIDS; serum; HIV; human immunodeficiency virus;  
 KW antigen measurement; diagnosis; nested PCR primer; ss.  
 XX Synthetic.

OS Human immunodeficiency virus 2.

XX JP10094394-A.

XX 14-APR-1998.

XX 20-SEP-1996; 96JP-00271467.

XX 20-SEP-1996; 96JP-00271467.

XX (EIKE ) EIKEN KAGAKU KK.

XX WPI; 1998-279230/25.

XX Retrovirus reacting with AIDS patient serum - useful for the exact  
 PT diagnosis of an unknown AIDS causing virus.  
 XX Example; Page 7; 16pp; Japanese.

XX This primer is used in the nested PCR amplification of the DNA base  
 CC sequences isolated from a retrovirus particle collected from the blood of  
 CC an AIDS patient. The specification provides DNA base sequences encoding a  
 CC retroviral protein which reacts with serum of AIDS patients. It provides  
 CC an antigen for the detection of an antibody against retrovirus which  
 CC consists of a peptide derived from these base sequences. The invention  
 CC provides a method for antigen measurement in which the above antigen is  
 CC contacted with a sample blood to determine immunoglobulin reacting with  
 CC the antigen and a method for screening the infection of retrovirus other  
 CC than HIV-1, HIV-2 subtype A which can be collected from an AIDS patient  
 CC blood by the above antibody measurement. The method can diagnose exactly  
 CC an unknown AIDS-causing virus

XX Sequence 20 BP; 4 A; 3 C; 7 G; 6 T; 0 U; 0 Other;  
 Query Match 0.7%; Score 14.4; DB 1; Length 20;  
 Best Local Similarity 93.8%; Pred. No. 2.7e+02;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1033 GAAGGAAGTACTACTA 1048  
 |||||:|||||  
 Db 20 GCAGGAAGTACTACTA 5

RESULT 245

AAV32006/c

```

ID AAV32006 standard; cDNA; 20 BP.
XX
AC AAV32006;
XX
DT 28-SEP-1998 (first entry)
XX
XX Flax SAD gene promoter primer oligonucleotide OL-39.
DE DE1 gene; SAD2 gene; stearoyl-acyl carrier protein desaturase; flax;
KW fatty acid; lipid; oilseed; promoter; transgenic plant; flax; probe; ss.
XX
XX Synthetic.
OS Linum usitatissimum.
XX
XX WO9818948-A1.
XX
XX 07-MAY-1998.
XX
XX 30-OCT-1997; 97WO-CA000812.
XX
XX 31-OCT-1996; 96US-0029416P.
XX
XX (CANA ) NAT RES COUNCIL CANADA.
XX
XX Jain RK, Thompson RG, Rowland GG, Mchughen AG, Mackenzie SL;
PI Taylor DC;
XX
XX WPI; 1998-272237/24.
XX
XX Isolated flax gene - used to develop products for modifying plants,
PT particularly for modifying fatty acids of membrane and storage lipid(s)
PT of plants.
XX
XX Disclosure; Page 12; 62pp; English.
XX
XX Oligonucleotide OL-39 corresponds to nucleotides 234-253 of the non-
CC coding strand of a published cDNA sequence for flax stearyl-acyl carrier
CC protein desaturase (SAD) cDNA. It was used as a PCR primer, together with
CC oligonucleotide primer OL-110 (see AAV32007), in an inverse PCR
CC amplification of flax genomic DNA. The 5' regulatory regions (see
CC AAV32000-01) of the flax SAD1 and SAD2 genes (see also AAV31998-99) were
CC obtained. These SAD gene promoter sequences can be used to enhance or
CC enable the expression of genes introduced into flax or other plants,
CC especially to manipulate the fatty acids of membrane and storage
CC lipids
XX
XX Sequence 20 BP; 5 A; 1 C; 9 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 2.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1122 CAGTTCACCTTCACC 1137
DB 18 CAGTTCACCTTCACC 3
RESULT 246
AAV22562/c
ID AAV22562 standard; DNA; 20 BP.
XX
AC AAV22562;
XX
XX 08-JUL-1998 (first entry)
DT
DE Antisense oligonucleotide designed to target the R1 message.
XX
XX R1 subunit; ribonucleotide reductase; cell proliferation; tumour cell;
KW antisense; growth; inhibition; sensitivity; hydroxyurea;
KW chemotherapeutic drug; methotrexate; PALA; treatment; ss.
XX
XX Synthetic.
OS Homo sapiens.
XX
XX WO9805769-A2.
XX
XX 12-FEB-1998.
XX
XX 01-AUG-1997; 97WO-CA000540.
XX
XX 02-AUG-1996; 96US-0023040P.
XX
XX 07-MAR-1997; 97US-0039959P.
XX
XX (GENE-) GENESENSE TECHNOLOGIES INC.
XX
XX Wright JA, Young AH;
XX
XX WPI; 1998-145609/13.
XX
XX Antisense oligonucleotides to ribonucleotide reductase genes - used to
PT modulate tumour growth and inhibit tumour cell proliferation.
XX
XX Claim 8; Page 48; 79pp; English.
XX
XX AAV22531-89 represent antisense oligonucleotides which are targeted
CC against the mRNA of the R1 subunit sequence of ribonucleotide reductase.
CC Aberrant expression of the R2 gene, which encodes the second subunit of
CC the ribonucleotide reductase gene, can determine the malignant
CC characteristics of cells. Suppression of R2 and R1 gene expression was
CC found to reduce transformed properties of tumour cells. The antisense
CC oligonucleotides can be used for modulating tumour cell growth, or for
CC inhibiting tumour cell proliferation. They can also be used for
CC increasing the sensitivity of neoplastic cells to chemotherapeutic drugs
CC (especially to hydroxyurea, methotrexate (MTX), and PALA). The antisense
CC oligonucleotides may be used to treat proliferative disorders including
CC leukaemias, lymphomas, sarcomas, melanomas, various other forms of
CC cancer, papillomas, arthrogelerosis, psoriasis, polychemia, mastocytosis,
CC autoimmune diseases, angiogenesis, bacterial infections and viral
CC infections (including HIV hepatitis, or herpes infections)
XX
XX Sequence 20 BP; 12 A; 3 C; 4 G; 1 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 2.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 908 TTTCCTTTGCTCTTG 923
DB 18 TTTCCTTTGCTCTTG 3
RESULT 247
AAC69238
ID AAC69238 standard; DNA; 20 BP.
XX
XX AAC69238;
XX
XX 29-JAN-2001 (first entry)
DT
DE Human ABC1 gene exon 34 3' PCR primer, SEQ ID NO:137.
XX
XX Human ABC1 cholesterol transporter; chromosome 9q31;
KW ATP-binding cassette; HDL deficiency disorder; high density lipoprotein;
KW Tangier disease; TD; familial HDL deficiency; FHA; polymorphism;
KW cardiovascular disease; coronary artery disease; coronary restenosis;
KW cerebrovascular disease; peripheral vascular disease;
KW Alzheimer's disease; Niemann-Pick disease; Huntington's disease;
KW X-linked adrenoleukodystrophy; cancer; gene therapy; genetic diagnosis;
KW prognosis; prophylaxis; drug screening; transgenic animal; PCR primer;
XX ss,
XX
XX Homo sapiens.
OS
XX WO200055318-A2.
XX
XX 21-SEP-2000.
XX

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```
XX 15-MAR-2000; 2000WO-IB000532.
XX 15-MAR-1999; 99US-0124702P.
PR 08-JUN-1999; 99US-0138048P.
PR 17-JUN-1999; 99US-0139600P.
PR 01-SEP-1999; 99US-0151977P.
XX (UYBR-) UNIV BRITISH COLUMBIA.
PA (XENO-) XENON BIORESEARCH INC.
XX
XX Hayden MR, Wilson AR, Pimstone SN;
XX WPI; 2000-587528/55.
XX
XX New ABC1 polypeptide is useful for treating diseases associated with ABC1
XX biological activity, e.g. Alzheimer's disease, Huntington's disease and
XX cancer.
XX
XX Disclosure; Fig 10; 229pp; English.
XX
XX The invention relates to the human ABC1 cholesterol transporter protein
XX (B38082) and to nucleic acid sequences (C69120) which encode it. ABC1 is
XX a member of the ATP-binding cassette (ABC transporter) superfamily of
XX proteins, and plays a crucial role in cholesterol transport, particularly
XX intracellular cholesterol trafficking in monocytes and fibroblasts, being
XX involved in cholesterol efflux from the cell. The gene encoding ABC1 is
XX located on chromosome 9q31, and mutations in this gene are associated
XX with two genetic HDL (high density lipoprotein) deficiency disorders,
XX Tangier disease (TD) and familial HDL deficiency (FHA). These diseases
XX are distinguishable in that TD is an autosomal recessive disorder, while
XX FHA is inherited as an autosomal dominant trait. Low levels of HDL ("good
XX cholesterol") in the blood correlate with a high risk of cardiovascular
XX disease, particularly coronary artery disease, but also cerebrovascular
XX disease, coronary restenosis, and peripheral vascular disease.
XX Conversely, a high level of HDL has protective effects against
XX cardiovascular disease. The invention provides genetic constructs and
XX transgenic cells and non-human animals comprising human ABC1 nucleic
XX acids, and methods of gene therapy for the treatment or prevention of
XX cardiovascular disease comprising the administration of an expression
XX vector encoding ABC1 or an active fragment thereof. The invention also
XX encompasses compounds which mimic ABC1 activity, compounds which
XX stimulate ABC1 expression and methods of screening for such compounds. It
XX further relates to methods for determining whether a patient has an
XX increased risk for cardiovascular disease due to polymorphisms in the
XX ABC1 gene. Human ABC1 proteins and nucleotides can be used to treat or
XX prevent cardiovascular disease, especially coronary artery disease,
XX cerebrovascular disease, coronary restenosis or peripheral vascular
XX disease. They may also be used in the treatment of diseases associated
XX with ABC1 biological activity, such as Alzheimer's disease, Niemann-Pick
XX disease, Huntington's disease, X-linked adrenoleukodystrophy and cancer.
XX The invention specifically excludes proteins with the exact amino acid
XX sequences of GenBank Accession No: CAA10005.1 and X75926, and the nucleic
XX acid with the exact sequence as GenBank Accession No: AJ012376.1. The
XX present sequence represents a human ABC1 gene PCR primer which may be
XX used to amplify an exon of the human ABC1 gene
XX
XX Sequence 20 BP; 3 A; 10 C; 2 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 14.4; DB 1; Length 20;
XX Best Local Similarity 93.8%; Pred. No. 2.7e+02;
XX Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 1070 GCTTCAGTCCCACTCC 1085
XX
XX Db 1 GCTTAAGTCCCACTCC 16
XX
XX RESULT 248
XX AAA90791/c
XX ID AAA90791 standard; DNA; 20 BP.
XX
XX AAA90791;
XX
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```
XX 20-DEC-2000 (first entry)
XX
XX Ribonucleotide reductase R1 message antisense oligo AS-I-1162-20.
XX
XX Antisense oligonucleotide; ribonucleotide reductase; R1 protein;
XX R2 protein; tumour cell proliferation inhibition; cancer; cytostatic; ss.
XX
XX Synthetic.
XX
XX WO200047733-A1.
XX
XX 17-AUG-2000.
XX
XX 09-FEB-2000; 2000WO-CA000120.
XX
XX 11-FEB-1999; 99US-00249730.
XX
XX (GENE-) GENESENSE TECHNOLOGIES INC.
XX
XX Wright JA, Young AH;
XX
XX WPI; 2000-558216/51.
XX
XX New antisense oligonucleotide, AS-I-618-20, is useful for inhibiting
XX tumor cell growth.
XX
XX Example 3; Page 31; 137pp; English.
XX
XX The present sequence is an antisense oligonucleotide directed against the
XX mRNA encoding the R1 component of mammalian ribonucleotide reductase.
XX Ribonucleotide reductase catalyses the conversion of ribonucleotides to
XX their corresponding deoxyribonucleotides and thus plays an important role
XX in DNA synthesis and cell proliferation. Regulation of ribonucleotide
XX reductase is altered in cultured malignant cells and increased levels of
XX R2 protein and R2 mRNA have been found in pre-malignant and malignant
XX tissues as compared to normal control tissue samples. The present
XX antisense sequence is therefore useful for inhibiting tumorigenicity of
XX neoplastic cells and inhibiting metastasis of tumour cells. It is also
XX useful for increasing sensitivity of neoplastic cells to chemotherapeutic
XX drugs, thus allowing chemotherapeutic treatments to be used in patients
XX who have become resistant or less sensitive to chemotherapy. The sequence
XX may be RNA or DNA and may comprise a modified backbone and/or nucleotide
XX analogues
XX
XX Sequence 20 BP; 12 A; 3 C; 4 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 14.4; DB 1; Length 20;
XX Best Local Similarity 93.8%; Pred. No. 2.7e+02;
XX Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 908 TTTTCTTTGGTCTTTG 923
XX
XX Db 18 TTTTCTTTGGTCTTTG 3
XX
XX RESULT 249
XX AAC67181/c
XX
XX ID AAC67181 standard; DNA; 20 BP.
XX
XX AAC67181;
XX
XX 03-APR-2001 (first entry)
XX
XX Human E2F transcription factor 3 mRNA antisense sequence SEQ ID NO: 54.
XX
XX Human E2F transcription factor 3; antisense; E2F-3; cancer;
XX phosphorothioate backbone; infection; inflammation; PCR primer; ss.
XX
XX Homo sapiens.
XX
XX US6165791-A.
XX
```



```
PD 26-DEC-2000.
XX
XX
XX 24-FEB-2000; 2000US-00513729.
XX
XX 24-FEB-2000; 2000US-00513729.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Popoff I, Wyatt J;
XX
XX WPI; 2001-101698/11.
XX
XX Novel antisense compounds targeted to E2F transcription factor 3 for
XX diagnosis, prophylaxis and treatment of diseases associated with E2F
XX transcription factor 3 such as infection, inflammation or tumor
XX formation.
XX
XX Example 15; Col 43-44; 4lpp; English.
XX
XX The present invention provides antisense oligonucleotides with
XX phosphorothioate backbones directed at the human E2F transcription factor
XX 3 (E2F-3) coding sequences. These can be used in the therapy of diseases
XX which can be treated by modulating E2F-3 expression and to prevent
XX infection, inflammation and tumour formation
XX
XX Sequence 20 BP; 2 A; 12 C; 2 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 14.4; DB 1; Length 20;
XX Best Local Similarity 93.8%; Pred. No. 2.7e+02;
XX Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 1021 GAGGGGAGCTTGAAG 1036
XX |||||
XX DB 20 GAGGGGAGCTTGGAG 5
XX
XX RESULT 250
XX ABS54859/c
XX ID ABS54859 standard; DNA; 20 BP.
XX
XX AC ABS54859;
XX
XX 04-DEC-2002 (first entry)
XX Human ankyrin 4 cDNA PCR primer #2.
XX
XX Human; ankyrin 4; primer; PCR; ss; nervous system disease.
XX
XX Homo sapiens.
XX
XX CN1293251-A.
XX
XX 02-MAY-2001.
XX
XX 18-OCT-1999; 99CN-00123133.
XX
XX 18-OCT-1999; 99CN-00123133.
XX
XX (SHEN-) SHENGYUAN GENE DEV CO LTD SHANGHAI.
XX
XX Mao Y, Xie Y;
XX
XX WPI; 2001-418931/45.
XX
XX Human ankyrin and polynucleotide sequence encoding ankyrin.
XX
XX Example 3; Page 24 (Disclosure); 37pp; Chinese.
XX
XX The invention relates to a human ankyrin 4 polypeptide and the
XX polynucleotide encoding it. The sequences are used for treating diseases
XX of the nervous system and nervous system related diseases and for
XX diagnosing the diseases relative to them by detecting a mutation in the
XX nucleic acid sequence and by monitoring the ankyrin protein level. This
XX
XX CC sequence represents a PCR primer used in cloning of cDNA encoding a human
XX CC ankyrin 4 polypeptide
XX
XX SQ Sequence 20 BP; 5 A; 4 C; 7 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 14.4; DB 1; Length 20;
XX Best Local Similarity 93.8%; Pred. No. 2.7e+02;
XX Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 1141 AGCTCCACCTATACCC 1156
XX |||||
XX DB 19 AGCTTCACCTATACCC 4
XX
XX RESULT 251
XX AAA85941/c
XX ID AAA85941 standard; DNA; 19 BP.
XX
XX AC AAA85941;
XX
XX 04-DEC-2000 (first entry)
XX
XX Cdc 25 hs ribozyme binding site #49.
XX
XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX
XX Mammalia.
XX
XX WO2000032765-A2.
XX
XX 08-JUN-2000.
XX
XX 06-DEC-1999; 99WO-US028772.
XX
XX 04-DEC-1998; 98US-0110954P.
XX
XX (IMMU-) IMMUSOL INC.
XX
XX Tritz R, Welch PJ, Barber JR, Robbins JM;
XX
XX WPI; 2000-412314/35.
XX
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
XX RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
XX PCNA and Cyclin B1.
XX
XX Disclosure; Page 100; 109pp; English.
XX
XX The present invention relates to a hairpin or hammerhead ribozyme,
XX designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
XX other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
XX Representative examples of ribozyme recognition sites are given in
XX AAA82415 to AAA86787. The ribozyme of the invention is useful for
XX inhibiting restenosis by introduction of the ribozyme into cells. The
XX ribozyme is resistant to endonuclease activity and hence is efficient in
XX restenosis treatment
XX
XX Sequence 19 BP; 0 A; 3 C; 5 G; 11 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 14.2; DB 1; Length 19;
XX Best Local Similarity 84.2%; Pred. No. 2.6e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 729 CCAGGAGAAACAGACACC 747
XX |||||
XX DB 19 CCAGGAGAAACACAAACC 1
XX
XX RESULT 252
XX AAD16173/c
XX ID AAD16173 standard; DNA; 19 BP.
XX
XX AC AAD16173;
```

XX 19-NOV-2001 (first entry)  
 XX Bacterial cell identifying PCR lower primer #1.  
 DE Cell isolation; bacterial cell; non-specific ligand; eukaryotic parasite;  
 XX PCR primer; ss.  
 KW Bacteria.  
 OS WO200153525-A2.  
 XX 26-JUL-2001.  
 PD 22-JAN-2001; 2001WO-GB000240.  
 XX 21-JAN-2000; 2000GB-00001450.  
 PR (GENP-) GENPOINT AS.  
 PA (GARD/) GARDNER R.  
 XX Refseth UH, Kolpus T;  
 XX WPI; 2001-541431/50.  
 XX Isolating cells from a sample, particularly bacterial cell, comprises  
 PT binding the cells to a solid support by means of a non-specific ligand  
 PT immobilized on the solid support.  
 PT Example 2; Page 29; 77pp; English.  
 XX The present invention relates to a method for isolating cells from a  
 CC sample comprising binding the cells to a solid support using a non-  
 CC specific ligand immobilized on the solid support. The method is useful  
 CC for isolating a wide variety of microorganisms, specifically bacteria, in  
 CC a sample. The method may also be used in the isolation of eukaryotic  
 CC parasites, particularly those which are able to bind the complex  
 CC polysaccharides found on human cell, to isolate simultaneously bacteria  
 CC and other types of microorganism, such as algae, protozoa, fungi or  
 CC viruses, or to capture all types of white blood cells from a blood or  
 CC blood derived sample, from bone marrow or any tissue or fluid containing  
 CC white blood cells. The present sequence is a PCR primer which is used for  
 CC identification of isolated bacteria  
 XX Sequence 19 BP; 8 A; 5 C; 4 G; 2 T; 0 U; 0 Other;  
 SQ Query Match 0.7%; Score 14.2; DB 1; Length 19;  
 Best Local Similarity 84.2%; Pred. No. 2.6e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 937 CTCCTCATGCTTTAATGT 955  
 DB 19 CTCCTCATGCTTTAATGT 1  
 RESULT 253  
 AAH61103/c  
 ID AAH61103 standard; DNA; 19 BP.  
 XX AAH61103;  
 AC 10-SEP-2001 (first entry)  
 DT Cdc25 hs ribozyme binding site SEQ ID NO:3527.  
 XX Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;  
 KW recognition site; target; ribozyme binding site; eye disease; vulnary;  
 KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;  
 KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;  
 KW matrix metalloproteinase; growth factor; reductase; scarring; cytoskeletal;  
 KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;  
 KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;  
 KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;  
 OS

KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;  
 XX sickle cell retinopathy; ss.  
 OS Homo sapiens.  
 OS Synthetic.  
 XX WO200130362-A2.  
 XX 03-MAY-2001.  
 PD 26-OCT-2000; 2000WO-US029500.  
 PF 26-OCT-1999; 99US-0161532P.  
 XX (IMMU-) IMMUSOL INC.  
 XX Robbins JM, Tritz R;  
 XX WPI; 2001-300427/31.  
 XX Treating proliferative skin or eye diseases and scarring, using ribozymes  
 PT that cleave RNA encoding cytokines involved in inflammation, matrix  
 PT metalloproteinases, growth factors and cell-cycle dependent kinases.  
 XX Example 1; Page 328; 408pp; English.  
 XX The present invention describes a method for treating a proliferative  
 CC skin or eye disease and scarring. The method involves administering a  
 CC ribozyme (I) which cleaves RNA encoding a cytokine involved in  
 CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle  
 CC dependent kinase, growth factor or a reductase, or administering a  
 CC nucleic acid molecule (II) comprising a promoter operably linked to a  
 CC nucleic acid segment encoding (I). (I) can have antipsoriatic,  
 CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,  
 CC ophthalmological, vulnary, keratolytic and virucide activities, and  
 CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used  
 CC in gene therapy. (I) and (II) are useful for treating proliferative skin  
 CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,  
 CC squamous or basal cell carcinoma and viral or seborrheic wart. They can  
 CC also be used for treating proliferative eye diseases such as diabetic  
 CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of  
 CC prematurity and retinal detachment, and for treating and preventing  
 CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn  
 CC scar. AAH57577 to AAH62099 represent sequences used in the  
 CC exemplification of the present invention  
 XX Sequence 19 BP; 0 A; 3 C; 5 G; 11 T; 0 U; 0 Other;  
 SQ Query Match 0.7%; Score 14.2; DB 1; Length 19;  
 Best Local Similarity 84.2%; Pred. No. 2.6e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 729 CCAGGAGAAACAGAACACC 747  
 DB 19 CCAGGAGAAACAAACACC 1  
 RESULT 254  
 AAF70533/c  
 ID AAF70533 standard; DNA; 19 BP.  
 XX AAF70533;  
 AC 20-APR-2001 (first entry)  
 DT Human DRD2 fragment 12 PCR primer SEQ ID NO:276.  
 XX Human; dopamine receptor D2; DRD2; polymorphism; allele specific;  
 KW drug target isogene; detection; single nucleotide polymorphism; SNP;  
 KW genotype; schizophrenia; Parkinson's disease; myoclonus dystonia; MD;  
 KW probe; PCR primer; ss.  
 XX Homo sapiens.  
 OS

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XX WO200105832-A1.
XX 25-JAN-2001.
XX
XX 19-JUL-2000; 2000WO-US019644.
XX
XX 19-JUL-1999; 99US-0144493P.
XX
XX (GENA-) GENAISSANCE PHARM INC.
XX
XX Chew A, Denton RR, Duda A, Nandabalan K, Stephens JC;
XX WPI; 2001-091967/10.
XX
XX polynucleotides comprising single nucleotide polymorphisms in the human
XX dopamine receptor D2, useful for detecting mutations associated with,
XX e.g. schizophrenia, Parkinson's and myoclonus dystonia.
XX
XX Example 1B; Page 43; 135pp; English.
XX
XX The present invention describes polynucleotides comprising single
XX nucleotide polymorphisms (SNPs) in the human dopamine receptor D2 (DRD2).
XX The polynucleotides may be used in assays to detect and characterise
XX polymorphisms in DRD2 that affect its expression and activity and are
XX involved in disorders such as schizophrenia, Parkinson's and myoclonus
XX dystonia (MD). This information would be useful for studying the
XX biological function of DRD2 as well as in identifying drugs targeting
XX this protein for the treatment of disorders related to its abnormal
XX expression or function. Polymorphisms in the DRD2 gene affect the
XX expression of active and functional polypeptides. Therefore it is
XX advantageous to detect polymorphisms in the DRD2 gene and how those
XX polymorphisms are combined in different copies of the gene. AAF70261 to
XX AAF70308 represent human DRD2 allele specific oligonucleotide probes, and
XX AAF70309 to AAF70404 represent human DRD2 allele specific oligonucleotide
XX primers which are used in the detection of DRD2 polymorphisms. AAF70405
XX to AAF70452 represent oligonucleotide primers for the detection of human
XX DRD2 polymorphisms which are given in the exemplification of the present
XX invention. AAF70453 to AAF70538 represent PCR primers for the human DRD2
XX gene which are used in examples from the present invention.
XX
XX Sequence 19 BP; 5 A; 1 C; 10 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 14.2; DB 1; Length 19;
XX Best Local Similarity 84.2%; Pred. No. 2.6e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX Qy 1128 CACCTTCACCTCCAGCTCC 1146
XX Db 19 CATCTCCATCTCCAGCTCC 1
XX
XX RESULT 255
XX AAD27475/c
XX ID AAD27475 standard; DNA; 19 BP.
XX
XX AC AAD27475;
XX
XX 18-APR-2002 (first entry)
XX
XX Human TREK-2 gene exon-intron 1-exon DNA.
XX
XX Human; TWIK-Related K+ Channel-2; TREK-2; anaesthetic; screening; ds.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX FT exon 1..2
XX FT exon /*tag= a
XX FT intron 3..17
XX FT intron /*tag= b
XX FT intron /number= 1
XX FT exon 18..19

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FT /*tag= c
XX WO200200715-A2.
XX
XX 03-JAN-2002.
XX
XX 27-JUN-2001; 2001WO-IB001436.
XX
XX 27-JUN-2000; 2000US-0214559P.
XX
XX 27-JUN-2001; 2001US-00892360.
XX
XX (CNRS ) CNRS CENT NAT RECH SCI.
XX
XX Lazdunski M, Lesage F, Romey G;
XX WPI; 2002-139903/18.
XX
XX New mammalian K+ channel protein with two pore domains, for screening
XX various compounds, particularly for identifying biologically active
XX compounds with anaesthetic properties.
XX
XX Disclosure; Fig 1B; 50pp; English.
XX
XX The invention relates to a mammalian K+ channel protein with two pore
XX domains, called TREK2 (TWIK-Related K+ Channel). The protein produces
XX currents whose current-voltage relationship is slightly inwardly
XX rectifying in high symmetrical K+ conditions. TREK2 is a member of the
XX fatty acid-activated and mechanosensitive K+ channel family. TREK-2 gene
XX located on chromosome 14q31 is abundantly expressed in kidney, pancreas
XX and moderately in testis, brain, colon and small intestine. The mammalian
XX K+ channel protein is useful in methods for screening various compounds.
XX In particular, the protein is useful in methods for identifying
XX biologically active compounds with anaesthetic properties. The present
XX sequence is reverse transcription (RT) PCR primer used for analysing
XX human TREK-2 gene exon-intron-exon DNA sequence used in the invention
XX
XX Sequence 19 BP; 3 A; 7 C; 5 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 14.2; DB 1; Length 19;
XX Best Local Similarity 84.2%; Pred. No. 2.6e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX Qy 867 CACTGAGGACTCAGGACCC 885
XX Db 19 CACTGAGGAGTCAGGATCC 1
XX
XX RESULT 256
XX AAV11921/c
XX ID AAV11921 standard; DNA; 20 BP.
XX
XX AC AAV11921;
XX
XX 13-AUG-1998 (first entry)
XX
XX Hepatocyte growth factor inhibiting oligonucleotide #13.
XX
XX Hepatocyte growth factor; HGF; c-Met; modulator; inhibitor;
XX antitumour agent; anti-metastasis agent; primer; ss.
XX
XX Synthetic.
XX
XX OS
XX JP10127286-A.
XX
XX PD 19-MAY-1998.
XX
XX 01-NOV-1996; 96JP-00291499.
XX
XX 01-NOV-1996; 96JP-00291499.
XX
XX (TERU ) TERUMO CORP.
XX
XX WPI; 1998-340665/30.

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XX Oligo:nucleotide inhibiting HGF production - useful as antitumour and
PT anti-metastatic agent.
XX Claim 8; Page 10; 15pp; Japanese.
XX AAV11909-V11925, AAV11927 and AAV11928 are oligonucleotide primers used
CC to identify sequences which modulate or inhibit expression, production or
CC reception of hepatocyte growth factor (HGF) or expression of c-Met. Such
CC oligonucleotides are useful as antitumour or anti-metastasis agents
XX
SQ Sequence 20 BP; 9 A; 0 C; 11 G; 0 T; 0 U; 0 Other;

Query Match      0.7%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 924 CCTTTATCCCTCCCTTC 942
DB 19 CCTTTCTCCTCCCTTC 1

RESULT 257
AAV11923
ID AAV11923 standard; DNA; 20 BP.
XX
AC AAV11923;
XX
DT 13-AUG-1998 (first entry)
XX
DE Hepatocyte growth factor inhibiting oligonucleotide #15.
XX
KW Hepatocyte growth factor; HGF; c-Met; modulator; inhibitor;
KW antitumour agent; anti-metastasis agent; primer; ss.
XX
OS Synthetic.
XX
PN JP10127286-A.
XX
PD 19-MAY-1998.
XX
PF 01-NOV-1996; 96JP-00291499.
XX
PR 01-NOV-1996; 96JP-00291499.
XX
PA (TERU ) TERUMO CORP.
XX
DR WPI; 1998-340665/30.
XX
PT Oligo:nucleotide inhibiting HGF production - useful as antitumour and
PT anti-metastatic agent.
XX
PS Claim 8; Page 10; 15pp; Japanese.
XX
CC AAV11909-V11925, AAV11927 and AAV11928 are oligonucleotide primers used
CC to identify sequences which modulate or inhibit expression, production or
CC reception of hepatocyte growth factor (HGF) or expression of c-Met. Such
CC oligonucleotides are useful as antitumour or anti-metastasis agents
XX
SQ Sequence 20 BP; 0 A; 11 C; 0 G; 9 T; 0 U; 0 Other;

Query Match      0.7%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 924 CCTTTATCCCTCCCTTC 942
DB 2 CCTTTCTCCTCCCTTC 20

RESULT 258
AAZ19995
ID AAZ19995 standard; DNA; 20 BP.

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XX AAZ19995;
AC
XX
DT 21-DEC-1999 (first entry)
XX
DE Human uncoupling protein 2 gene primer 2565r.
XX
KW Uncoupling protein 2; UCP2; human; obesity; diabetes; diagnosis;
KW gene therapy; PCR; primer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9948905-A1.
XX
PD 30-SEP-1999.
XX
PF 23-MAR-1999; 99WO-US006317.
XX
PR 23-MAR-1998; 98US-0078972P.
XX
PA (MUSC-) MUSC FOUND RES DEV.
XX
PI Garvey WT, Argyropoulos G;
XX
DR WPI; 1999-591072/50.
XX
PT Use of uncoupled protein 2 or 3 as markers for identifying subjects at
PT risk of developing obesity or diabetes.
XX
PS Example 3; Page 72; 112pp; English.
XX
CC This is the nucleotide sequence of a primer termed 2565r. A set of
CC primers (see AAZ19971-73 and AAZ19977-95) including 2565r was used in the
CC PCR amplification and sequencing of genomic fragments of the human
CC uncoupling protein 2 (UCP2) gene (see AAZ19967). The invention provides a
CC method for identifying a subject having a risk of developing obesity
CC and/or type II diabetes mellitus by detecting the presence of a single
CC nucleotide polymorphism in UCP2 or UCP3 nucleic acid (see AAZ19967-70)
XX
SQ Sequence 20 BP; 6 A; 3 C; 8 G; 3 T; 0 U; 0 Other;

Query Match      0.7%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 853 GAGATGTTAAGGCACTG 871
DB 1 GAGCATGTAAGGCACAG 19

RESULT 259
AAZ96519/c
ID AAZ96519 standard; DNA; 20 BP.
XX
AC AAZ96519;
XX
DT 13-SEP-1999 (first entry)
XX
DE PCR primer used to amplify an ORF of Chlamydia pneumoniae.
XX
KW Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;
KW sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;
KW neutralising epitope; PCR primer; ss.
XX
OS Synthetic.
OS Chlamydia pneumoniae.
XX
PN WO9927105-A2.
XX
PD 03-JUN-1999.
XX
PF 20-NOV-1998; 98WO-IB001890.

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QY	1134	CACCTCCAGCTCCACCTAT	1152
Db	19	CACCTCCAAATCCCCCTAT	1

XX  
1714000000

QY 1134 CACCTCCAGCTCCACCTAT 1152  
Db 19 CACCTCCAAATCCCCCTAT 1

XX DE Human procalcitonin pCT PCR primer 1099.  
 XX DE Procalcitonin; pCT; antitumor; antiinflammatory; tumor;  
 KW sepsis; systemic inflammatory response syndrome; PCR primer; ss.  
 XX OS Homo sapiens.  
 XX PN EP1111050-A2.  
 XX PN 27-JUN-2001.  
 XX PD 24-NOV-2000; 2000EP-00125719.  
 XX PF 22-DEC-1999; 99DE-01062434.  
 XX PR 03-APR-2000; 2000DE-01016278.  
 XX PR 08-JUN-2000; 2000DE-01027954.  
 XX XX (DADE-) DADE BEHRING MARBURG GMBH.  
 XX FA Althaus H, Hauser HP;  
 XX PI WPI; 2001-572431/65.  
 XX DR New, preferably recombinant, human procalcitonin, useful for diagnosis  
 XX PT and treatment of sepsis, tumors and systemic inflammatory response  
 XX PT syndrome.  
 XX PS Example 1; Page 22; 36pp; German.  
 XX CC This invention describes novel isolated, preferably recombinant,  
 CC polypeptides (I) containing the amino acid sequence for human  
 CC procalcitonin (hPCT). The products of the invention have antitumor,  
 CC antiseptic and antiinflammatory activity. (I) (also antibodies (Ab)  
 CC raised against it) are used: (i) for diagnosis and treatment of tumors,  
 CC sepsis and systemic inflammatory response syndrome; (ii) to raise Ab;  
 CC (iii) for quantitative or qualitative detection and analysis, especially  
 CC of hPCT and antibodies against it; (iv) as controls or standards for  
 CC assays; and (v) for affinity chromatography. Isolated (I) can be produced  
 CC inexpensively in large amounts by recombinant expression. Solutions of  
 CC (I) that contain a polyethoxylated sterol ester have good storage  
 CC stability. This sequence represents a PCR primer used in the  
 CC amplification of human procalcitonin pCT  
 XX SQ Sequence 20 BP; 4 A; 3 C; 8 G; 5 T; 0 U; 0 Other;  
 Query Match 0.7%; Score 14.2; DB 1; Length 20;  
 Best Local Similarity 84.2%; Pred. No. 3e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1057 GCCCAACCCCAAGCTTCA 1075  
 Db 20 GCCCAGATCTAGCTTCA 2  
 RESULT 265  
 AAD21385/c  
 ID AAD21385 standard; DNA; 20 BP.  
 XX AC AAD21385;  
 XX DT 28-JAN-2002 (first entry)  
 XX DE Antisense oligo, HYB 964, directed against human XPA gene.  
 XX KW Human; cytotoxin; cancer; transcription coupled repair; TCR;  
 KW nucleotide excision repair; NER; antisense; cytosstatic;  
 KW Xeroderma pigmentosum group A; XPA; ss.  
 XX OS Homo sapiens.  
 XX OS Synthetic.  
 XX PI Key Location/Qualifiers

FT modified\_base 1..20  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "Phosphorothioate backbone"  
 XX WO200174346-A2.  
 XX PD 11-OCT-2001.  
 XX PF 03-APR-2001; 2001WO-US010800.  
 XX PR 03-APR-2000; 2000US-0194343P.  
 XX PA (HYBR-) HYBRIDON INC.  
 XX PI Agrawal S, Kandimalla ER, Bregman DB, Mani S, Lu Y;  
 XX DR WPI; 2001-662947/76.  
 XX CC Increasing sensitivity of cancer cells to a cytotoxin or oxidizing agent  
 XX PT useful for therapy comprises contacting them with oligonucleotides  
 XX PT complementary to transcription coupled repair or nucleotide excision  
 XX PT repair genes.  
 XX PS Claim 15; Page 18; 58pp; English.  
 XX CC The present invention relates to a method for potentiating or enhancing  
 CC the toxic effect of a cytotoxin or oxidising agent on a cancer cell,  
 CC comprising contacting the cell with an oligonucleotide complementary to a  
 CC gene involved in transcription coupled repair (TCR) and nucleotide  
 CC excision repair (NER) and with a cytotoxin or oxidising agent. The  
 CC invention is used to sensitize cancer cells to therapeutic agents. The  
 CC present sequence is an antisense oligonucleotide directed against  
 CC Xeroderma pigmentosum group A (XPA) gene  
 XX SQ Sequence 20 BP; 4 A; 9 C; 2 G; 5 T; 0 U; 0 Other;  
 Query Match 0.7%; Score 14.2; DB 1; Length 20;  
 Best Local Similarity 84.2%; Pred. No. 3e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1268 TTCAGAGTGGGAGGACAG 1286  
 Db 19 TGCAGAGTGGTAGGTGAG 1  
 RESULT 266  
 ABK30573/c  
 ID ABK30573 standard; DNA; 20 BP.  
 XX AC ABK30573;  
 XX DT 23-APR-2002 (first entry)  
 XX DE Human glioma-associated oncogene-1 antisense oligonucleotide ISIS 124905.  
 XX KW Human; glioma-associated oncogene-1 associated disease; infection;  
 KW inflammation; tumour formation; cytosstatic; antiinflammatory; antisense;  
 KW phosphorothioate; ss.  
 XX OS Homo sapiens.  
 XX PN US6329203-B1.  
 XX PD 11-DEC-2001.  
 XX PF 08-SEP-2000; 2000US-00657042.  
 XX PR 08-SEP-2000; 2000US-00657042.  
 XX PA (ISIS-) ISIS PHARM INC.  
 XX PI Bennett CF, Wyatt J;

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XX DR WPI; 2002-138363/18.
XX PT Novel antisense compounds targeted to nucleic acids encoding glioma-
XX PT associated oncogene-1, for modulating the gene expression and treating
XX PT diseases associated with expression of the oncogene in humans.
XX PS Example 15; Col 45-46; 43pp; English.
XX CC The present invention relates to antisense compounds and methods for
XX CC modulating the expression of human glioma-associated oncogene-1. The
XX CC antisense compounds, particularly antisense oligonucleotides, target and
XX CC inhibit the expression of human glioma-associated oncogene-1. The
XX CC antisense compounds are useful for inhibiting the expression of human
XX CC glioma-associated oncogene-1 in human cells or tissues and for treating
XX CC an animal, particularly a human suspected of having or being prone to a
XX CC disease or condition associated with expression of glioma-associated
XX CC oncogene-1. The compounds are useful for diagnostics, therapeutics and as
XX CC research reagent, e.g. prophylactically to prevent or delay infection,
XX CC inflammation or tumor formation. The antisense compounds are safely and
XX CC effectively administered to humans. ABK30509-ABK30586 represent the
XX CC antisense oligonucleotides of the invention which comprise a
XX CC phosphorothioate backbone
XX SQ Sequence 20 BP; 3 A; 7 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1012 CCTGAAAGAGGGGGAGC 1030
Db 19 CCAGAAAAATTGGGGGAGC 1

RESULT 267
AAD37207
ID AAD37207 standard; DNA; 20 BP.
XX AC AAD37207;
XX DT 21-AUG-2002 (first entry)
XX DE Human MEKK4 antisense oligonucleotide, ISIS #123142.
XX KW Human; MEKK4 modulation; mitogen-activated protein kinase kinase 4; WTK1;
XX KW MAP3K4; MAP three kinase 1; MAP/ERK kinase kinase 4; MAPKKK4; cytostatic;
XX KW prophylaxis; immunological; hyperproliferative disorder; cancer; therapy;
XX KW antisense; inflammatory; phosphorothioate backbone; ss.
XX OS Homo sapiens.
XX OS Synthetic.
XX PH Key Location/Qualifiers
XX FT modified_base 1..20
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "Phosphorothioate backbone"
XX FT modified_base 1..5
XX FT /*tag= b
XX FT /mod_base= OTHER
XX FT /note= "2'-methoxyethyl nucleotides"
XX FT modified_base 10
XX FT /*tag= d
XX FT /mod_base= m5c
XX FT modified_base 11
XX FT /*tag= e
XX FT /mod_base= m5c
XX FT modified_base 13
XX FT /*tag= f
XX FT /mod_base= m5c
XX FT modified_base 16..20
XX FT /*tag= c

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FT FT /mod_base= OTHER
FT FT 18
FT FT /*tag= g
FT FT /mod_base= m5c
FT FT modified_base 19
FT FT /*tag= h
FT FT /mod_base= m5c
XX XX WO200227033-A1.
XX PN 04-APR-2002.
XX PD 28-SEP-2001; 2001WO-US030549.
XX PF 29-SEP-2000; 2000US-00676436.
XX PR (ISIS-) ISIS PHARM INC.
XX PA Ward DT, Gaarde WA, Monia BP, Wyatt JR;
XX PI WPI; 2002-416486/44.
XX DR New antisense compound targeted to nucleic acid encoding mitogen-
XX SQ activated protein kinase 4, useful for treating immunologic disorder,
XX SQ inflammatory disorder or cancer.
XX PS Claim 3; Page 93; 132pp; English.
XX CC The present invention relates to antisense compounds, compositions and
XX CC methods for modulating the expression of MEKK4 (also referred as mitogen-
XX CC activated protein kinase kinase 4; MAP3K4; MAP three kinase 1; MAP/ERK
XX CC kinase kinase 4; MAPKKK4; WTK1). The antisense oligos are useful for
XX CC inhibiting the expression of MEKK4 in cells or tissues. They are also
XX CC useful for treating an animal having a disease or condition associated
XX CC with MEKK4 such as immunological, inflammatory, hyperproliferative
XX CC disorder or cancer. Sequences of the invention are also useful for
XX CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
XX CC They are also useful in antisense therapy. The present sequence is an
XX CC antisense oligonucleotide targeted to human MEKK4 DNA. This sequence is
XX CC used in the exemplification of the invention
XX SQ Sequence 20 BP; 2 A; 5 C; 2 G; 11 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 907 ATTTCTTTGTCCTTTGCC 925
Db 1 ATTTGTTTCCTTTTGCC 19

RESULT 268
ABV73834
ID ABV73834 standard; DNA; 20 BP.
XX AC ABV73834;
XX DT 08-JAN-2003 (first entry)
XX DE Phosphorothioate oligonucleotide for AIDS therapy.
XX KW Phosphorothioate; HIV-1; azasugar; AIDS; virucide; antiviral; anti-HIV;
XX KW therapy; ss.
XX OS Synthetic.
XX PH Key Location/Qualifiers
XX FT modified_base 1..20
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "phosphorothioate linkage"

```





KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
 KW lung inflammation; respiratory disease; ds.  
 XX Homo sapiens.  
 OS WO200285308-A2.  
 PN 31-OCT-2002.  
 XX 23-APR-2002; 2002WO-US013135.  
 XX 24-APR-2001; 2001US-0286137P.  
 XX (EPIG-) EPIGENESIS PHARM INC.  
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
 PI Miller S, Tang L, Shahabuddin S;  
 XX WPI; 2003-229219/22.  
 XX Pharmaceutical composition for treating ailments associated with impaired  
 PT respiration, has oligo(s) antisense to specific gene(s) or its  
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
 PT ubiquinone.  
 XX Disclosure; SEQ ID NO 4331; 872pp; English.  
 XX The invention relates to a novel pharmaceutical composition, which has a  
 CC first active agent comprising an oligonucleotide antisense to the  
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
 CC junctions of genes encoding a polypeptide associated with lung and/or  
 CC nasal airway dysfunction and a second active agent comprising an  
 CC antiinflammatory steroid and ubiquinone. A composition of the invention  
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive, and  
 CC immunosuppressive, and cytostatic activity. The composition may have a  
 CC use in antisense gene therapy. The composition is useful for treating or  
 CC preventing a respiratory, lung or malignant disease or condition, also  
 CC for enhancing the prophylactic or therapeutic respiratory effect of an  
 CC antiinflammatory steroid in a subject, for reducing or depleting levels  
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
 CC lung inflammation, lung allergies, or a respiratory disease or condition.  
 CC Note: The sequence data for this patent is not represented in the printed  
 CC specification, but was obtained in electronic format directly from WIPO  
 CC at ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 20 BP; 3 A; 2 C; 10 G; 5 T; 0 U; 0 Other;  
 Query Match 0.7%; Score 14.2; DB 1; Length 20;  
 Best Local Similarity 84.2%; Pred. No. 3e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1051 CCCCTGGCCGACCCAA 1069  
 Db 19 CCCTTGACCCGACCCAA 1  
 RESULT 271  
 ABZ77254  
 ID ABZ77254 standard; DNA; 20 BP.  
 XX ABZ77254;  
 XX 28-MAY-2003 (first entry)  
 DE Antisense oligonucleotide for C-reactive protein coding region.  
 XX Antisense oligonucleotide; C-reactive protein; phosphorothioate;  
 KW cardiovascular disease; unstable angina; myocardial infarction; ss.  
 XX Synthetic.

OS Homo sapiens.  
 XX WO2003010284-A2.  
 PN 06-FEB-2003.  
 XX 15-JUL-2002; 2002WO-US022656.  
 XX 25-JUL-2001; 2001US-00912724.  
 XX (ISIS-) ISIS PHARM INC.  
 XX Crooke RM, Graham MJ;  
 XX WPI; 2003-239435/23.  
 XX New antisense oligonucleotides, useful for modulating the expression of C  
 PT -reactive protein or for treating a disease or condition associated with  
 PT the expression of C-reactive protein, e.g. unstable angina or myocardial  
 PT infarction.  
 XX Claim 3; Page 93; 113pp; English.  
 XX The specification describes antisense oligonucleotides which are  
 CC targeting to DNA encoding C-reactive protein. The antisense compounds are  
 CC useful for modulating the expression of C-reactive protein, and for  
 CC treating a disease or condition associated with expression of C-reactive  
 CC protein, e.g. cardiovascular disease, such as unstable angina or  
 CC myocardial infarction. ABZ7722-75 represent antisense oligonucleotides  
 CC of the invention, directed against human C-reactive protein gene  
 XX Sequence 20 BP; 1 A; 9 C; 3 G; 7 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.7%; Score 14.2; DB 1; Length 20;  
 Best Local Similarity 84.2%; Pred. No. 3e+02;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1091 TCACCCCCACCCCTGGGCTT 1109  
 Db 2 TCTTCCTCACCCCTGGGCTT 20  
 RESULT 272  
 AAD56960  
 ID AAD56960 standard; DNA; 20 BP.  
 XX AAD56960;  
 XX 06-NOV-2003 (first entry)  
 XX Human mucin 1 transmembrane antisense oligonucleotide ISIS #199401.  
 KW Human; mucin 1 transmembrane; hyperproliferative disorder; cytostatic;  
 KW inflammatory disorder; gene therapy; H23-E7A transmembrane antigen;  
 KW antisense; epistatin; epitectin; polymorphic epithelial mucin; CD227;  
 KW peanut-reactive urinary mucin; PUM; epithelial membrane antigen; EMA;  
 KW PEM; NCR11; H23 antigen; DF3 antigen; phosphorothioate backbone; MUC1;  
 KW PAS-0; ss.  
 XX Homo sapiens.  
 OS Synthetic.  
 XX Key Location/Qualifiers  
 FH modified\_base 1..20  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "Phosphorothioate backbone; All cytidines are 5-  
 FT methyl cytidines"  
 FT modified\_base 1..5  
 FT /\*tag= b  
 FT /mod\_base= OTHER  
 FT /note= "2'-methoxyethoxy (2'-MOE) nucleotides"  
 FT modified\_base 16..20

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FT FT /*tag= C
FT FT /mod_base= OTHER
XX XX /note= "2'-methoxyethoxy (2'-MOE) nucleotides"
PN PN WO2003054154-A2.
XX XX
PD PD 03-JUL-2003.
XX XX
XX XX 13-DEC-2002; 2002WO-US039873.
XX XX
XX XX 20-DEC-2001; 2001US-00029517.
XX XX
XX XX (ISIS-) ISIS PHARM INC.
XX XX
XX XX Dobie KW, Myers SJ;
XX XX
XX XX WPI; 2003-559135/52.
XX XX
XX XX New compound, having a sequence targeted to a nucleic acid encoding mucin
PT PT 1, transmembrane, useful for preparing a composition for treating
PT PT hyperproliferative or inflammatory disorders.
XX XX
XX XX Claim 3; Page 81; 132pp; English.
XX XX
XX XX The present invention relates to antisense oligonucleotides targeted to
CC CC a nucleic acid encoding mucin 1 transmembrane (also known as MUC1,
CC CC episialin, epitectin, polymorphic epithelial mucin; PEM, peanut-reactive
CC CC urinary mucin; PUM, epithelial membrane antigen; EMA, PAS-0, NCRC11, H23
CC CC antigen, H23-ETA transmembrane antigen, DF3 antigen and CD227) to
CC CC inhibit/modulate the expression of mucin 1 transmembrane. Antisense
CC CC compounds of the invention are useful for preparing compositions for
CC CC treating hyperproliferative or inflammatory disorders. The invention is
CC CC also used in gene therapy. The present sequence is human mucin 1
CC CC transmembrane antisense oligonucleotide
XX XX
XX XX Sequence 20 BP; 8 A; 5 C; 3 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX XX
XX XX 797 CCTGTAGTAACTGTAGAA 815
DB 2 CCTGTAACTGTAGCA 20
XX XX
RESULT 273
AAL60009/c
ID AAL60009 standard; DNA; 20 BP.
XX XX
XX XX AAL60009;
AC AC
XX XX
XX XX 27-AUG-2003 (first entry)
XX XX
XX XX Human GH-1 gene amplifying PCR primer, CRVL56.1tl.
XX XX
XX XX Human; growth hormone 1; GH-1; single nucleotide polymorphism; SNP;
XX XX gene therapy; PCR; primer; ss.
XX XX
XX XX Homo sapiens.
XX XX
XX XX WO2003042226-A2.
PN PN
XX XX
XX XX 22-MAY-2003.
PD PD
XX XX
XX XX 07-NOV-2002; 2002WO-US035719.
XX XX
XX XX 09-NOV-2001; 2001US-0347448P.
XX XX
XX XX (PHAA ) PHARMACIA & UPJOHN CO.
XX XX
XX XX Wood LS, Wagner S, Parodi LA;
PI PI
XX XX
DR WPI; 2003-449555/42.
XX XX
XX XX New growth hormone 1 (GH-1) diagnostic polynucleotide, useful as markers
PT PT for the analysis of a disease, or of susceptibility to drug treatment for
PT PT GH-1 dysfunction or other diseases.
XX XX
XX XX Example 2; Page 30; 74pp; English.
XX XX
XX XX The invention relates to growth hormone 1 (GH-1) gene including single
CC CC nucleotide polymorphisms (SNP). The GH-1 diagnostic polynucleotide is
CC CC useful as markers for the analysis of a disease, of susceptibility to
CC CC drug treatment for GH-1 dysfunction or other diseases, or may be included
CC CC in any complete or partial genetic map of the human genome. GH-1 mutant
CC CC polypeptides are useful as antagonists of GH-1 hormone action.
CC CC Polynucleotides encoding these polypeptides are useful in gene therapy.
CC CC The present sequence is a PCR primer used for amplifying human GH-1 gene
XX XX
XX XX Sequence 20 BP; 2 A; 9 C; 1 G; 8 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX XX
XX XX 1011 ACCTGAAAAGAGGGGGAG 1029
DB 19 ATCTGAAAAGAGGAGAG 1
XX XX
RESULT 274
ABT34958/c
ID ABT34958 standard; DNA; 17 BP.
XX XX
XX XX ABT34958;
AC AC
XX XX
XX XX 12-JUN-2003 (first entry)
DT DT
XX XX
XX XX Tumour suppression related human fukutin oligo SEQ ID No 595.
DE DE
XX XX
XX XX Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
XX XX antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
XX XX schizophrenia; protein chip; gene therapy; tumour suppression;
XX XX human fukutin; ds.
XX XX
XX XX Homo sapiens.
XX XX
XX XX WO2003025175-A2.
PN PN
XX XX
XX XX 27-MAR-2003.
PD PD
XX XX
XX XX 17-SEP-2002; 2002WO-IB004208.
XX XX
XX XX 17-SEP-2001; 2001EP-00011978.
XX XX
XX XX (MOLE-) MOLECULAR ENGINES LAB.
PA PA
XX XX
XX XX Telexman A, Amson R, Tuijnder M;
PI PI
XX XX
XX XX WPI; 2003-313353/30.
DR DR
XX XX
XX XX New isolated nucleic acid, useful for treating viral diseases associated
PT PT with tumors and cell degeneration, also related polypeptides, antibodies
PT PT and transfected cells.
XX XX
XX XX Disclosure; Page 103; 720pp; French.
XX XX
XX XX The invention relates to a novel isolated 17 mer nucleic acid sequence,
CC CC given in the specification, a sequence containing at least 15 consecutive
CC CC nucleotides from the 17 mer sequence, a sequence with, after optimal
CC CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that
CC CC hybridizes to them under highly stringent conditions, or the complement
CC CC of any of them, or the corresponding RNA. The novel isolated nucleic
CC CC acids of the invention are useful as probes and primers for detecting,
CC CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one

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CC component of a gene chip, in vitro as (anti)sense reagents, and for  
 CC production of recombinant polypeptides. Any of the nucleic acids,  
 CC polypeptides, vectors containing the nucleic acids, cells containing the  
 CC vector or antibodies directed against the polypeptides are useful for  
 CC preparation of pharmaceuticals for prevention and/or treatment of viral  
 CC diseases that are characterized by development of tumours or cell  
 CC degeneration, specifically cancer but also Alzheimer's disease and  
 CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in  
 CC patient samples is useful for diagnosis and/or prognosis of these  
 CC diseases. The polypeptides can also be used to generate antibodies, and  
 CC both the polypeptide and antibodies are useful as components of protein  
 CC chips. The nucleic acid sequences of the invention can be used in gene  
 CC therapy. This polynucleotide sequence represents a tumour suppression  
 CC related human fukutin oligonucleotide of the invention  
 XX  
 SQ Sequence 17 BP; 2 A; 8 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.6%; Score 14; DB 1; Length 17;  
 Best Local Similarity 100.0%; Pred. No. 2e+02;  
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1270 CAGAAAGTGGGAGGA 1283  
 Db 16 CAGAAAGTGGGAGGA 3

RESULT 275  
 AAV14110/c  
 ID AAV14110 standard; DNA; 18 BP.

XX AC AAV14110;

DT 27-AUG-2003 (revised)  
 DT 19-MAY-1998 (first entry)

DE Probe HBPr276 for RT pol region of HBV.

XX Probe; hepatitis b virus; HBV detection; RT pol region; genetic analysis;  
 KW preCore region; HBsAg region; genotype specific target;  
 KW mutation detection; ss.

OS Synthetic.  
 OS Hepatitis B virus.

XX WO9740193-A2.

XX 30-OCT-1997.

XX 21-APR-1997; 97WO-EP002002.

XX 19-APR-1996; 96EP-00870053.

XX (INNO-) INNOGENETICS NV.

XX Stuyver L, Rossau R, Maertens G;

XX WPI; 1997-535867/49.

XX Detection and/or genetic analysis of hepatitis B virus - specifically  
 PT genotype, preCore mutations, vaccine escape mutations and RT gene  
 PT mutations selected by treatment with drugs.

XX Claim 5; Fig 1; 80pp; English.

XX This sequence represents a probe for the RT pol region of hepatitis b  
 CC virus (HBV). This sequence can be used in the method of the invention for  
 CC detection and/or genetic analysis of hepatitis B virus (HBV) in a sample.  
 CC The method comprises: (a) optionally releasing, isolating or  
 CC concentrating polynucleic acids (I) in the sample, and amplifying the  
 CC relevant part of a suitable HBV gene in the sample with at least 1  
 CC suitable primer pair; (b) hybridising (I) with a combination of at least  
 CC 2 nucleotide probes, which are applied to known locations on a solid  
 CC support and hybridise specifically to mutant target sequences chosen from

CC the HBV RT pol gene region, HBV preCore region, HBsAg region and/or HBV  
 CC genotype specific target sequences, or their complements or U for T  
 CC homologues; (c) detecting the hybrids formed in step (b), and inferring  
 CC the HBV genotype and/or mutants present in the sample from the  
 CC differential hybridisation signal(s). The composition can be used to  
 CC diagnose and/or monitor HBV mutants and/or genotypes in a sample.  
 CC specifically genotype, preCore mutations, vaccine escape mutations and RT  
 CC gene mutations selected by treatment with drugs, e.g. lamivudine and  
 CC penciclovir. (Updated on 27-AUG-2003 to correct OS field.)

XX SQ Sequence 18 BP; 1 A; 7 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.6%; Score 14; DB 1; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 2.4e+02;  
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 728 GCCAGGAGAAACAG 741  
 Db 18 GCCAGGAGAAACAG 5

RESULT 276  
 AAT84911  
 ID AAT84911 standard; cDNA; 20 BP.

XX AC AAT84911;

XX 30-MAR-1998 (first entry)

XX Human Werner's syndrome WP-2 gene 5'-end PCR primer SP-2.

XX Werner's syndrome; WP-2; sterility; reproductive system; detection;  
 KW diagnostic; pharmaceutical; PCR primer; ss.

OS Synthetic.

OS Homo sapiens.

XX JP09206080-A.

XX 12-AUG-1997.

XX 31-JAN-1996; 96JP-00016236.

XX 31-JAN-1996; 96JP-00016236.

XX (EIJU-) EIJIN KENKYUSHO KK.

XX WPI; 1997-460746/43.

XX Werner's syndrome causing gene WS-2 - useful to detect diseases causing  
 PT sterility and create novel sterility treating pharmaceutical  
 PT preparations.

XX Disclosure; Page 24; 29pp; Japanese.

XX PCR primers AAT84900-T84918 are used in the amplification of a novel  
 CC Werner's syndrome gene, WS-2, which is involved in the reproductive  
 CC system. This gene can be used to detect diseases causing sterility and  
 CC create novel sterility treating pharmaceutical preparations. It can also  
 CC be used to elucidate the onset of Werner's syndrome and its genetic  
 CC expression and regulation. Probes designed from this gene can be used to  
 CC examine and prevent diseases related to Werner's syndrome. The protein  
 CC encoded by the gene can be used study human ontogeny

XX SQ Sequence 20 BP; 3 A; 8 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.6%; Score 14; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 3.4e+02;  
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1083 TCCAGGCTTCACCC 1096  
 Db 4 TCCAGGCTTCACCC 17

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RESULT 277
ABK89166
ID ABK89166 standard; DNA; 20 BP.
XX AC ABK89166;
XX DT 21-OCT-2002 (first entry)
XX DE Human jAZF1 PCR primer 7SenseInner.
XX KW Human; jAZF1; juxtaposed with another zinc finger; jJAZ1; jJAZF1/jJAZ1;
XX KW joined with jAZF1; proliferation; endometrial stroma tumour; immunogen;
XX KW antigen; antibody; fertility; pregnancy; gene therapy; vaccine; PCR;
XX KW primer; ss.
XX OS Homo sapiens.
XX PN WO200193805-A2.
XX PD 13-DEC-2001.
XX EF 04-JUN-2001; 2001WO-US017936.
XX FR 02-JUN-2000; 2000US-0209093P.
XX PA (BGHM ) BRIGHAM & WOMENS HOSPITAL INC.
XX PI Koontz J, Sklar J;
XX DR WPI; 2002-575047/61.
XX PT Novel jAZF1, jJAZ1 or jAZF1/jJAZ1 polypeptides useful as immunogens or
XX PT antigens to raise or test anti-jAZF1, jJAZ1 or jAZF1/jJAZ1 antibodies.
XX PS Example 8; Page 58; 76pp; English.
XX CC The present invention relates to a new jAZF1 (juxtaposed with another
XX CC zinc finger), jJAZ1 (joined with jAZF1) or jAZF1/jJAZ1 polypeptide. The
XX CC methods of the invention can be used to identify a compound which
XX CC controls proliferation of endometrial stroma, by expressing jJAZ1 in the
XX CC presence of the compound, and determining whether the compound affects
XX CC expression of jJAZ. jAZF1, jJAZ1 or jAZF1/jJAZ1 polypeptides are useful
XX CC as immunogens or antigens to raise or test anti-jAZF1, jJAZ1 or
XX CC jAZF1/jJAZ1 antibodies. The invention can be used as bait proteins in a
XX CC two hybrid assay or three hybrid assay to identify other proteins which
XX CC bind or interact with jAZF1/jJAZ1-binding proteins. jAZF1, jJAZ1 or
XX CC jAZF1/jJAZ1 molecules are useful for identifying the origin of tumour and
XX CC as tumour marker protein to verify that a stromal tumour is from
XX CC endometrium. The antibody is useful for promoting or decreasing fertility
XX CC or pregnancy, and also for treating endometrial stromal tumours. The
XX CC present nucleic acid sequence represents a PCR primer that was used in
XX CC the methods of the invention for amplification of the human jAZF1 gene
XX CC located on chromosome 7
XX SQ Sequence 20 BP; 3 A; 10 C; 0 G; 7 T; 0 U; 0 Other;
Query Match 0.6%; Score 14; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 3.4e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 932 CCTCTCTCTTCATT 945
Db 7 CCTCTCTCTTCATT 20
RESULT 278
AAV97281/c
ID AAV97281 standard; RNA; 17 BP.
XX AC AAV97281;
XX KW Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
XX KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
XX KW hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic;
XX KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
XX KW dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;
XX KW age related macular degeneration; inflammation; neovascular glaucoma;
XX KW myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
XX KW tuberculous sclerosis; pot-wine stain; Sturge Weber syndrome;
17-MAR-1999 (first entry)
Human EGF-R target sequence nucleotide position 459.
Human epidermal growth factor receptor; EGFR; EGF-R; target sequence;
hammerhead ribozyme; hairpin ribozyme; inhibition; cell proliferation;
cancer; genetic drift; detection; mutation; ss.
Homo sapiens.
WO9833893-A2.
06-AUG-1998.
14-JAN-1998; 98WO-US000730.
31-JAN-1997; 97US-0036476P.
04-DEC-1997; 97US-00985162.
(RIBO-) RIBOZYME PHARM INC.
(UYAS-) UNIV ASTON.
Akhtar S, Fell P, Mcswiggen JA;
WPI; 1998-437449/37.
Enzymatic nucleic acids - which cleave RNA derived from an epidermal
growth factor receptor, useful for inhibiting cell proliferation and for
treating cancers.
Claim 5; Page 69; 109pp; English.
The present invention describes enzymatic nucleic acid molecules (NAMs)
which specifically cleave RNA derived from an epidermal growth factor
receptor (EGF-R) gene. AAV97221 to AAV98043 and AAV98979 to AAV99090
represent specifically claimed target sequence from human EGF-R. AAV98044
to AAV98866 and AAV98867 to V9878 represent hammerhead ribozymes and
hairpin ribozymes respectively for human EGF-R. The NAMs are useful for
cleaving EGF-R RNA in the treatment of a condition associated with EGFR
expression levels e.g. to inhibit cell proliferation in the prevention or
treatment of cancers. The NAMs can also be used as diagnostic tools to
examine genetic drift and mutations within diseased cells or to detect
the presence of EGF-R RNA in a cell
Sequence 17 BP; 3 A; 7 C; 2 G; 0 T; 5 U; 0 Other;
Query Match 0.6%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 2.3e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 860 TTAAGGGCACTGAGGAC 876
Db 17 TTGAGGGCAATGAGGAC 1
RESULT 279
AA23120
ID AA23120 standard; RNA; 17 BP.
XX AC AA23120;
XX DT 19-JUN-2000 (first entry)
XX DE Integrin subunit beta 3 substrate sequence SEQ ID NO:6346.
XX KW Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
XX KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
XX KW hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic;
XX KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
XX KW dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;
XX KW age related macular degeneration; inflammation; neovascular glaucoma;
XX KW myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
XX KW tuberculous sclerosis; pot-wine stain; Sturge Weber syndrome;

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KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.  
 XX Homo sapiens.  
 OS  
 KW WO9950403-A2.  
 PN  
 XX WO9950403-A2.  
 KW  
 XX 07-OCT-1999.  
 PD  
 XX  
 XX 24-MAR-1999; 99WO-US006507.  
 PF  
 XX  
 XX 27-MAR-1998; 98US-0079678P.  
 PR  
 XX  
 XX (RIBO-) RIBOZYME PHARM INC.  
 PA  
 XX Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;  
 PI WPI; 1999-591315/50.  
 DR  
 XX Novel ribozymes for modulating the synthesis, expression and/or stability  
 PT of an mRNA encoding an angiogenic factors.  
 PS  
 XX Claim 54; Page 263; 305pp; English.  
 XX The present invention describes enzymatic nucleic acid molecules with RNA  
 CC cleaving activity, which specifically cleave RNA encoded by an aryl  
 CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3  
 CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to  
 CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,  
 CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their  
 CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to  
 CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086  
 CC AAA19223 to AAA19222 represent their corresponding target sequences;  
 CC AAA19155 to AAA19222 represent their corresponding target sequences;  
 CC AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme  
 CC sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and  
 CC AAA21596 to AAA21688 represent their corresponding target sequences;  
 CC AAA21689 to AAA22475 and AAA23263 to AAA23262, AAA23343 to  
 CC for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to  
 CC AAA23422 represent their corresponding target sequences. The ribozymes of  
 CC the invention are used for modulating the synthesis, expression and/or  
 CC stability of an mRNA encoding angiogenic factor, especially ARNT.  
 CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are  
 CC especially used to treat cancer, diabetic retinopathy, age related  
 CC macular degeneration (ARMD), inflammation, and arthritis, as well as  
 CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,  
 CC angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber  
 CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,  
 CC and other syndromes and diseases related to the levels of ARNT, Tie-2,  
 CC integrin subunit alpha-6, or integrin subunit beta-3  
 XX  
 SQ Sequence 17 BP; 2 A; 4 C; 4 G; 0 T; 7 U; 0 Other;  
 Query Match 0.6%; Score 13.8; DB 1; Length 17;  
 Best Local Similarity 52.9%; Pred. No. 2.3e+02;  
 Matches 9; Conservative 6; Mismatches 2; Indels 0; Gaps 0;  
 QY 787 GAGTGTGCTCTCTGTAG 803  
 DB ||| : : : ||| : : |||  
 1 GACUUUGUCUCCUGUAG 17  
 RESULT 280  
 AAA23133/C  
 ID AAA23133 standard; RNA; 17 BP.  
 XX  
 AC AAA23133;  
 XX  
 XX 19-JUN-2000 (first entry)  
 DT  
 XX Integrin subunit beta 3 substrate sequence SEQ ID NO:6359.  
 DE  
 XX Human; aryl hydrocarbon nuclear transporter; ARNT; Tie-2; angiogenesis;  
 KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;  
 KW hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic;

KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;  
 KW dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;  
 KW age related macular degeneration; inflammation; neovascular glaucoma;  
 KW myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;  
 KW tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;  
 KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.  
 XX Homo sapiens.  
 OS  
 XX WO9950403-A2.  
 PN  
 XX  
 XX 07-OCT-1999.  
 XX  
 XX 24-MAR-1999; 99WO-US006507.  
 PF  
 XX  
 XX 27-MAR-1998; 98US-0079678P.  
 PR  
 XX  
 XX (RIBO-) RIBOZYME PHARM INC.  
 PA  
 XX Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;  
 PI WPI; 1999-591315/50.  
 DR  
 XX Novel ribozymes for modulating the synthesis, expression and/or stability  
 PT of an mRNA encoding an angiogenic factors.  
 PS  
 XX Claim 54; Page 264; 305pp; English.  
 XX The present invention describes enzymatic nucleic acid molecules with RNA  
 CC cleaving activity, which specifically cleave RNA encoded by an aryl  
 CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3  
 CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to  
 CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,  
 CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their  
 CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to  
 CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086  
 CC AAA19223 to AAA19222 represent their corresponding target sequences;  
 CC AAA19155 to AAA19222 represent their corresponding target sequences;  
 CC AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme  
 CC sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and  
 CC AAA21596 to AAA21688 represent their corresponding target sequences;  
 CC AAA21689 to AAA22475 and AAA23263 to AAA23262, AAA23343 to  
 CC for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to  
 CC AAA23422 represent their corresponding target sequences. The ribozymes of  
 CC the invention are used for modulating the synthesis, expression and/or  
 CC stability of an mRNA encoding angiogenic factor, especially ARNT.  
 CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are  
 CC especially used to treat cancer, diabetic retinopathy, age related  
 CC macular degeneration (ARMD), inflammation, and arthritis, as well as  
 CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,  
 CC angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber  
 CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,  
 CC and other syndromes and diseases related to the levels of ARNT, Tie-2,  
 CC integrin subunit alpha-6, or integrin subunit beta-3  
 XX  
 SQ Sequence 17 BP; 2 A; 5 C; 3 G; 0 T; 7 U; 0 Other;  
 Query Match 0.6%; Score 13.8; DB 1; Length 17;  
 Best Local Similarity 88.2%; Pred. No. 2.3e+02;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 863 AGGCACCTGAGGACTCA 879  
 DB ||| ||||| ||||| |||||  
 17 AGGAAACTGAGGACTCA 1  
 RESULT 281  
 ABK03541/C  
 ID ABK03541 standard; RNA; 17 BP.  
 XX  
 AC ABK03541;  
 XX  
 XX 12-MAR-2002 (first entry)  
 DT  
 XX Integrin subunit beta-3

DE Human CD20 Zinzyme #92.  
XX Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;  
KW cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;  
KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;  
KW DNazyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;  
KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;  
KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;  
KW MCL; immunocytoma; IMC; immune thrombocytopenia; stroke; dementia;  
KW inflammatory arthropathy; central nervous system injury;  
KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;  
KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;  
KW Parkinson's disease; ataxia; Huntington's disease;  
KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
XX WO200159103-A2.  
XX  
XX 16-AUG-2001.  
XX  
XX 09-FEB-2001; 2001WO-US004273.  
XX  
XX 11-FEB-2000; 2000US-0181797P.  
PR 28-FEB-2000; 2000US-0185516P.  
PR 06-MAR-2000; 2000US-0187128P.  
XX  
XX (RIBO-) RIBOZYME PHARM INC.  
PA (BLAT/) BLATT L.  
PA (MCSW/) MCSWIGGEN J.  
PA (CHOW/) CHOWIRRA B M.  
XX  
PI Blatt L, Mcswiggen J, Chowirra BM,  
XX WPI; 2001-607195/69.  
XX  
XX Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense  
PT constructs, which down regulate expression of a CD20 gene or neurite  
PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and  
PT central nervous system injury.  
XX  
PS Claim 30; Page 155; 200pp; English.  
XX  
CC The invention relates to a nucleic acid molecule which down regulates  
CC expression of a CD20 gene and a nucleic acid molecule which down  
CC regulates expression of a neurite growth inhibitor gene (NOGO). The  
CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a  
CC DNazyme) an inozyme (an endolytic nucleic acid cleaving an RNA molecule  
CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or  
CC an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA  
CC with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA  
CC of CD20 in the presence of a divalent cation that is preferably Mg<sup>2+</sup>.  
CC Furthermore, it may be contacted with a cell to reduce CD20 activity of  
CC the cell and treat a patient having a condition associated with the level  
CC of CD20. The treatment may further comprise the use of one or more  
CC therapies. In particular, the CD20 targeting nucleic acid may be used to  
CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-  
CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic  
CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell  
CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,  
CC immune thrombocytopenia, and inflammatory arthropathy. The NOGO-  
CC targeting nucleic acid is used to cleave RNA of the NOGO gene in the  
CC presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, the  
CC nucleic acid may be contacted with a cell to reduce NOGO activity of the  
CC cell and treat a patient having a condition associated with the level of  
CC NOGO. The treatment may further comprise the use of one or more  
CC therapies. In particular, the NOGO-targeting nucleic acid may be used to  
CC treat central nervous system (CNS) injury and cerebrovascular accident  
CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),  
CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),  
CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob  
CC disease, muscular dystrophy, and/or other neurodegenerative disease

CC states which respond to the modulation of NOGO expression. The present  
CC sequence is a zinzyme molecule of the invention  
XX  
SQ Sequence 17 BP; 5 A; 4 C; 2 G; 0 T; 6 U; 0 Other;  
Query Match 0.6%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 2.3e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 799 TGTAGTAACTCTAAGAA 815  
DB 17 TGTGTTACTCTAAGAA 1  
RESULT 382  
ABN00979  
ID ABN00979 standard; DNA; 17 BP.  
XX  
XX AC ABN00979;  
XX  
XX 29-MAY-2002 (first entry)  
XX  
DE Human GDMPLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:971.  
XX  
KW Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;  
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;  
KW skeletal muscle disorder; amplicon; screening; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO200192524-A2.  
XX  
XX 06-DEC-2001.  
XX  
XX 25-MAY-2001; 2001WO-US016981.  
XX  
XX 26-MAY-2000; 2000US-0207456P.  
PR 21-SEP-2000; 2000US-0234687P.  
PR 27-SEP-2000; 2000US-0236359P.  
PR 04-OCT-2000; 2000GB-00024263.  
PR 30-JAN-2001; 2001WO-US000661.  
PR 30-JAN-2001; 2001WO-US000662.  
PR 30-JAN-2001; 2001WO-US000663.  
PR 30-JAN-2001; 2001WO-US000664.  
PR 30-JAN-2001; 2001WO-US000665.  
PR 30-JAN-2001; 2001WO-US000666.  
PR 30-JAN-2001; 2001WO-US000667.  
PR 30-JAN-2001; 2001WO-US000668.  
PR 30-JAN-2001; 2001WO-US000669.  
PR 30-JAN-2001; 2001WO-US000670.  
PR 05-FEB-2001; 2001US-0266860P.  
XX  
XX (AEOM-) AEOMICA INC.  
XX  
XX Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;  
PI WPI; 2002-179446/23.  
XX  
XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,  
PT or as specific biomolecule capture probes for surface-enhanced laser  
PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.  
XX  
XX Disclosure; SEQ ID NO 971; 214pp; English.  
XX  
XX The present invention describes a human genome-derived myosin-like  
CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-  
CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1  
CC nucleic acids can be used as probes to detect, characterize and quantify  
CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to  
CC provide initial substrates for the recombinant engineering of hGDMPLP-1  
CC protein variants having desired phenotypic improvements, and for  
CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be  
CC used as immunogens to raise antibodies that specifically recognise hGDMPLP

-1 proteins, as standards in assays used to determine the concentration and/or amount specifically of hGDMLP proteins, as specific biomolecule capture probes for surface-enhanced laser desorption/ionisation, as therapeutic supplement in patients having specific deficiency in hGDMLP-1 production, and in vaccines or for replacement therapy. The polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a disorder associated with the expression of hGDMLP-1, in particular heart and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22. The present sequence represents an oligomer used in the screening of the hGDMLP-1 sequence in the exemplification of the present invention. N.B. The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published\_pct\_sequence

Sequence 17 BP; 5 A; 9 C; 3 G; 0 T; 0 U; 0 Other;

Query Match 0.6%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 2.3e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1053 CTGCGCCCAACCCAA 1069  
||| ||||| |||||  
Db 1 CCAGGCCCAACCCAA 17

RESULT 283  
ABN00980  
ID ABN00980 standard; DNA; 17 BP.  
AC ABN00980;  
XX  
DT 29-MAY-2002 (first entry)  
XX  
DE Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:972.  
XX  
KW Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;  
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;  
KW skeletal muscle disorder; amplicon; screening; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200192524-A2.  
XX  
PD 06-DEC-2001.  
XX  
PF 25-MAY-2001; 2001WO-US016981.  
XX  
PR 26-MAY-2000; 2000US-0207456P.  
PR 21-SEP-2000; 2000US-0234687P.  
PR 27-SEP-2000; 2000US-0236359P.  
PR 04-OCT-2000; 2000GB-00024263.  
PR 30-JAN-2001; 2001WO-US000661.  
PR 30-JAN-2001; 2001WO-US000662.  
PR 30-JAN-2001; 2001WO-US000663.  
PR 30-JAN-2001; 2001WO-US000664.  
PR 30-JAN-2001; 2001WO-US000665.  
PR 30-JAN-2001; 2001WO-US000666.  
PR 30-JAN-2001; 2001WO-US000667.  
PR 30-JAN-2001; 2001WO-US000668.  
PR 30-JAN-2001; 2001WO-US000669.  
PR 05-FEB-2001; 2001US-0266860P.  
XX  
PA (AEOM-) AEOMICA INC.  
XX  
PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;  
XX WPI; 2002-179446/23.  
XX  
PT New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,  
PT or as specific biomolecule capture probes for surface-enhanced laser  
PT desorption/ionization, comprises human myosin-like protein hGDMLP-1.  
XX

PS Disclosure; SEQ ID NO 972; 214pp; English.  
XX  
CC The present invention describes a human genome-derived myosin-like  
CC protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-  
CC 1 can be used in gene therapy and vaccine production. The hGDMLP-1  
CC nucleic acids can be used as probes to detect, characterise and quantify  
CC hGDMLP-1 nucleic acids in samples, as amplification substrates, to  
CC provide initial substrates for the recombinant engineering of hGDMLP-1  
CC protein variants having desired phenotypic improvements, and for  
CC expressing the proteins. The hGDMLP-1 proteins or polypeptides may be  
CC used as immunogens to raise antibodies that specifically recognise hGDMLP  
CC -1 proteins, as standards in assays used to determine the concentration  
CC and/or amount specifically of hGDMLP proteins, as specific biomolecule  
CC capture probes for surface-enhanced laser desorption/ionisation, as  
CC therapeutic supplement in patients having specific deficiency in hGDMLP-1  
CC production, and in vaccines or for replacement therapy. The  
CC polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a  
CC disorder associated with the expression of hGDMLP-1, in particular heart  
CC and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.  
CC The present sequence represents an oligomer used in the screening of the  
CC hGDMLP-1 sequence in the exemplification of the present invention. N.B.  
CC The sequence data for this patent did not form part of the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequence  
XX  
SQ Sequence 17 BP; 5 A; 8 C; 4 G; 0 T; 0 U; 0 Other;

Query Match 0.6%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 2.3e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1054 CTGCGCCCAACCCAAAG 1070  
||| ||||| |||||  
Db 1 CAGGCCCAACCCCAAG 17

RESULT 284  
ABK19363/C  
ID ABK19363 standard; RNA; 17 BP.  
XX  
AC ABK19363;  
XX  
DT 09-APR-2002 (first entry)  
XX  
DE Human ERG Amberzyme target sequence Seq ID No 2010.  
XX  
KW Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;  
KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;  
KW vulnery; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;  
KW tumour angiogenesis; diabetic retinopathy; macular degeneration;  
KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;  
KW angiofibroma of tuberous sclerosis; port-wine stain; wound healing;  
KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;  
KW Oster-Weber-rendu syndrome, leukaemia; osteoporosis; DNazyme; inozyme;  
KW amberzyme.  
XX  
OS Homo sapiens.  
XX  
PN WO200188124-A2.  
XX  
PD 22-NOV-2001.  
XX  
PF 16-MAY-2001; 2001WO-US015866.  
XX  
PR 16-MAY-2000; 2000US-00572021.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
XX (GLAX) GLAXO GROUP LTD.  
XX  
PI Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;  
XX WPI; 2002-082995/11.  
XX



PT Novel polynucleotide which down regulates expression of Ets-related gene,  
PT useful for treating cancer, diabetic retinopathy, macular degeneration,  
PT arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.  
XX  
XX Claim 4; Page 127; 149pp; English.

XX The invention relates to a nucleic acid molecule (I) which down regulates  
CC expression of an Ets-related gene (ERG). (I) is useful for treating  
CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,  
CC tumour angiogenesis, diabetic retinopathy, macular degeneration,  
CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca  
CC vulgaris, angiofibroma of tuberosus sclerosis, port-wine stains, Sturge  
CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu  
CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for  
CC treating a patient having a condition associated with the level of ERG  
CC by contacting cells of the patient with (I) under conditions suitable for  
CC the treatment. The method comprises the use of one or more therapies  
CC under conditions suitable for the treatment. Leukaemia or tumour  
CC angiogenesis is treated by administering (I) to the patient in  
CC conjunction with one or more of other therapies such as radiation or  
CC chemotherapy treatment. (I) is useful for reducing ERG activity in a  
CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of  
CC ERG gene, by contacting (I) with RNA, in the presence of a divalent  
CC cation such as Mg<sup>2+</sup>. (I) is useful for diagnosis of conditions and  
CC diseases related to the expression of ERG, and as diagnostic tool to  
CC examine genetic drift and mutations within diseased cells or to detect  
CC the presence of ERG RNA in a cell. (I) is useful for specifically  
CC targeting genes that share homology with ERG gene or ERG fusion genes.  
CC ABLK7354-ABK22719 represent nucleic acids, including antisense and  
CC enzymatic nucleic acid molecules which regulate expression of ERG, and  
CC related PCR primers of the invention

XX Sequence 17 BP; 4 A; 4 C; 5 G; 0 T; 4 U; 0 Other;

Query Match 0.6%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 2.3e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 752 GCACCTGCCATGCAGGT 768  
|||||  
Db 17 GCACATGCCATGCAGTT 1

RESULT 285  
ABT34732/C  
ID ABT34732 standard; DNA; 17 BP.  
XX  
XX  
AC ABT34732;

DT 12-JUN-2003 (first entry)  
DE  
DE Tumour suppression related human fukutin oligo SEQ ID No 369.

XX Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;  
XX antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;  
XX schizophrenia; protein chip; gene therapy; tumour suppression;  
XX human fukutin; ds.

XX Homo sapiens.

OS

FN WO2003025175-A2.

PD 27-MAR-2003.

PF 17-SEP-2002; 2002WO-IB004208.

PR 17-SEP-2001; 2001FR-00011978.

XX (MOLE-) MOLECULAR ENGINES LAB.

XX Telerman A, Amson R, Tuijnder M;

XX WPI; 2003-313353/30.

DR

XX New isolated nucleic acid, useful for treating viral diseases associated  
PT with tumors and cell degeneration, also related polypeptides, antibodies  
PT and transfected cells.

XX Disclosure; Page 77; 720pp; French.

XX The invention relates to a novel isolated 17 mer nucleic acid sequence,  
CC given in the specification, a sequence containing at least 15 consecutive  
CC nucleotides from the 17 mer sequence, a sequence with, after optimal  
CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that  
CC hybridizes to them under highly stringent conditions, or the complement  
CC of any of them, or the corresponding RNA. The novel isolated nucleic  
CC acids of the invention are useful as probes and primers for detecting,  
CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one  
CC component of a gene chip, in vitro as (anti)sense reagents, and for  
CC production of recombinant polypeptides. Any of the nucleic acids,  
CC polypeptides, vectors containing the nucleic acids, cells containing the  
CC vector or antibodies directed against the polypeptides are useful for  
CC preparation of pharmaceuticals for prevention and/or treatment of viral  
CC diseases that are characterised by development of tumours or cell  
CC degeneration, specifically cancer but also Alzheimer's disease and  
CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in  
CC patient samples is useful for diagnosis and/or prognosis of these  
CC diseases. The polypeptides can also be used to generate antibodies, and  
CC both the polypeptide and antibodies are useful as components of protein  
CC chips. The nucleic acid sequences of the invention can be used in gene  
CC therapy. This polynucleotide sequence represents a tumour suppression  
CC related human fukutin oligonucleotide of the invention

XX Sequence 17 BP; 1 A; 2 C; 9 G; 5 T; 0 U; 0 Other;

Query Match 0.6%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 2.3e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1289 CCCCAAGCCACAGC 1305  
|||||  
Db 17 CCCACAGCCACAGATC 1

RESULT 286  
ABT35098/C

ID ABT35098 standard; DNA; 17 BP.

XX  
XX  
AC ABT35098;

XX 12-JUN-2003 (first entry)

DE Tumour suppression related human fukutin oligo SEQ ID No 735.

XX Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;  
XX antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;  
XX schizophrenia; protein chip; gene therapy; tumour suppression;  
XX human fukutin; ds.

XX Homo sapiens.

OS

FN WO2003025175-A2.

PD 27-MAR-2003.

PF 17-SEP-2002; 2002WO-IB004208.

PR 17-SEP-2001; 2001FR-00011978.

XX (MOLE-) MOLECULAR ENGINES LAB.

XX Telerman A, Amson R, Tuijnder M;

XX WPI; 2003-313353/30.

XX New isolated nucleic acid, useful for treating viral diseases associated

PT with tumors and cell degeneration, also related polypeptides, antibodies  
 XX and transfected cells.

PS Disclosure; Page 120; 720pp; French.

XX  
 CC The invention relates to a novel isolated 17 mer nucleic acid sequence,  
 CC given in the specification, a sequence containing at least 15 consecutive  
 CC nucleotides from the 17 mer sequence, a sequence with, after optimal  
 CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that  
 CC hybridizes to them under highly stringent conditions, or the complement  
 CC of any of them, or the corresponding RNA. The novel isolated nucleic  
 CC acids of the invention are useful as probes and primers for detecting,  
 CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one  
 CC component of a gene chip, in vitro as (anti)sense reagents, and for  
 CC production of recombinant polypeptides. Any of the nucleic acids,  
 CC polypeptides, vectors containing the nucleic acids, cells containing the  
 CC vector or antibodies directed against the polypeptides are useful for  
 CC preparation of pharmaceuticals for prevention and/or treatment of viral  
 CC diseases that are characterized by development of tumours or cell  
 CC degeneration, specifically cancer but also Alzheimer's disease and  
 CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in  
 CC patient samples is useful for diagnosis and/or prognosis of these  
 CC diseases. The polypeptides can also be used to generate antibodies, and  
 CC both the polypeptide and antibodies are useful as components of protein  
 CC chips. The nucleic acid sequences of the invention can be used in gene  
 CC therapy. This polynucleotide sequence represents a tumour suppression  
 CC related human fukutin oligonucleotide of the invention

XX  
 SQ Sequence 17 BP; 4 A; 5 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.6%; Score 13.8; DB 1; Length 17;

Best Local Similarity 88.2%; Pred. No. 2.3e+02;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 968 GTTGAAGTCCAGATC 984

DB 17 GTTGAAGTCCAGATC 1

RESULT 287

ACA06764

ID ACA06764 standard; RNA; 17 BP.

XX ACA06764;

XX 03-JUN-2003 (first entry)

DE NFkB sub-unit modulating inozyme substrate #583.

XX Enzymatic nucleic acid; nuclear factor kappa B; NFkB; inozyme; zinzyme;  
 KW G-cleaver; amberyne; cancer; REL-A activity; breast cancer; human;  
 KW lung cancer; prostate cancer; colorectal cancer; brain cancer;  
 KW oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;  
 KW cervical cancer; head and neck cancer; ovarian cancer; melanoma;  
 KW lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;  
 KW chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate;  
 KW cyclophosphamide; doxorubicin; fluorouracil carboplatin; edatrexate;  
 KW gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;  
 KW rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;  
 KW gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;  
 KW transplant/graft rejection; reperfusion injury; glomerulonephritis;  
 KW allergic airway inflammation; inflammatory bowel disease; infection; ss.

OS Homo sapiens.

XX US2002177568-A1.

XX 28-NOV-2002.

XX 23-MAY-2001; 2001US-00864785.

XX 07-DEC-1992; 92US-00987132.

PR 18-MAY-1994; 94US-00245466.

PR 15-AUG-1994; 94US-00291932.  
 XX 23-DEC-1996; 95US-00777916.

XX (STIN/) STINCHOMB D T.

PA (MCSW/) MCSWIGGEN J.

PA (DRAP/) DRAPER K G.

XX Stinchcomb DT, Mcswiggen J, Draper KG;

XX WPI; 2003-340953/32.

XX Novel enzymatic nucleic acid molecules which down regulates expression of  
 PT a séquence encoding a subunit of nuclear factor kappa B useful for  
 PT treating cancer, inflammatory disorders and autoimmune diseases.

XX Claim 3; Page 35; 72pp; English.

CC The invention describes an enzymatic nucleic acid molecule (I) which down  
 CC regulates expression of a sequence encoding a subunit of nuclear factor  
 CC kappa B (NFkB), where (I) is an inozyme, zinzyme, G-cleaver or amberyne  
 CC configuration. The enzymatic nucleic acid molecule is adapted to treat  
 CC cancer and is useful for down-regulating REL-A activity in a cell for  
 CC treating a patient having a condition associated with the level of REL-A.  
 CC (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in  
 CC the presence of a divalent cation, especially Mg<sup>2+</sup>. The enzymatic and  
 CC antisense nucleic acid molecules are useful for treating breast, lung,  
 CC prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,  
 CC cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or  
 CC multidrug resistant cancer. The method involves use of other drug  
 CC therapies such as monoclonal antibodies, REL-A-specific inhibitors or  
 CC chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,  
 CC cyclophosphamide, doxorubicin, fluorouracil carboplatin, edatrexate,  
 CC gemcitabine or radiation therapy. The enzymatic and antisense nucleic  
 CC acid molecules are also useful for treating inflammatory disease such as  
 CC rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,  
 CC obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft  
 CC rejection, gene therapy applications, ischaemia/reperfusion injury  
 CC (central nervous system (CNS) and myocardial), glomerulonephritis,  
 CC sepsis, allergic airway inflammation, inflammatory bowel disease or  
 CC infection. This sequence represents the substrate of a novel enzymatic  
 CC nucleic acid molecule

XX  
 SQ Sequence 17 BP; 2 A; 12 C; 0 G; 0 T; 3 U; 0 Other;

Query Match 0.6%; Score 13.8; DB 1; Length 17;

Best Local Similarity 82.4%; Pred. No. 2.3e+02;

Matches 14; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1251 CCCCATCCCCAACCCCC 1267

DB 1 CCCCATCCCCAUCCUCC 17

RESULT 288

ABZ61919

ID ABZ61919 standard; RNA; 17 BP.

XX ABZ61919;

XX 21-MAR-2003 (first entry)

XX Human H-Ras DNAzyme target #710.

XX Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;  
 KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;  
 KW anti-rheumatic; cancer; AIDS; ss.

OS Homo sapiens.

XX WO200297114-A2.

XX 05-DEC-2002.

```
PF 29-MAY-2002; 2002WO-US016840.
XX
XX 29-MAY-2001; 2001US-0294140P.
PR 06-JUN-2001; 2001US-0296249P.
PR 10-SEP-2001; 2001US-0318471P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Mcswiggen J;
XX
XX WPI; 2003-140484/13.
XX
XX Novel short interfering RNA and enzymatic nucleic acid useful for
PT treating cancer, modulates the expression of a nucleic acid encoding
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
XX Claim 58; Page 124; 185pp; English.
XX
XX The invention relates to a novel short interfering RNA (siRNA) nucleic
CC acid molecule or an enzymatic nucleic acid molecule, that modulates
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC acid molecule of the invention has cytostatic, anti-HIV, and anti-
CC rheumatic activity. The nucleic acid molecules are useful for reducing
CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC also useful for treating breast, ovarian, colorectal, lung, prostate,
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC ribozymes of the invention
XX
XX Sequence 17 BP; 3 A; 1 C; 9 G; 0 T; 4 U; 0 Other;
SQ
Query Match 0.6%; Score 13.8; DB 1; Length 17;
Best Local Similarity 64.7%; Pred. NO. 2.3e+02;
Matches 11; Conservative 4; Mismatches 2; Indels 0; Gaps 0;
Qy 821 TGGAGTGCACGAGTTG 837
Db 1 UGGAGUGGACGAGGUUG 17
RESULT 289
ABZ64907/c
ID ABZ64907 standard; RNA; 17 BP.
XX
XX AC ABZ64907;
XX
XX 21-MAR-2003 (first entry)
XX
XX Human HER2 DNazyme substrate #364.
XX
XX Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
XX enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
XX anti-rheumatic; cancer; AIDS; ss.
XX
XX Homo sapiens.
XX
XX WO200297114-A2.
XX
XX 05-DEC-2002.
XX
XX 29-MAY-2002; 2002WO-US016840.
XX
XX 29-MAY-2001; 2001US-0294140P.
PR 06-JUN-2001; 2001US-0296249P.
PR 10-SEP-2001; 2001US-0318471P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Mcswiggen J;
XX
XX WPI; 2003-140484/13.
XX
XX Novel short interfering RNA and enzymatic nucleic acid useful for
PT treating cancer, modulates the expression of a nucleic acid encoding
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
XX Claim 58; Page 124; 185pp; English.
XX
XX The invention relates to a novel short interfering RNA (siRNA) nucleic
CC acid molecule or an enzymatic nucleic acid molecule, that modulates
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC acid molecule of the invention has cytostatic, anti-HIV, and anti-
CC rheumatic activity. The nucleic acid molecules are useful for reducing
CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC also useful for treating breast, ovarian, colorectal, lung, prostate,
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC ribozymes of the invention
XX
XX Sequence 17 BP; 3 A; 1 C; 9 G; 0 T; 4 U; 0 Other;
SQ
Query Match 0.6%; Score 13.8; DB 1; Length 17;
Best Local Similarity 64.7%; Pred. NO. 2.3e+02;
Matches 11; Conservative 4; Mismatches 2; Indels 0; Gaps 0;
Qy 821 TGGAGTGCACGAGTTG 837
Db 1 UGGAGUGGACGAGGUUG 17
RESULT 289
ABZ64907/c
ID ABZ64907 standard; RNA; 17 BP.
XX
XX AC ABZ64907;
XX
XX 21-MAR-2003 (first entry)
XX
XX Human HER2 DNazyme substrate #364.
XX
XX Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
XX enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
XX anti-rheumatic; cancer; AIDS; ss.
XX
XX Homo sapiens.
XX
XX WO200297114-A2.
XX
XX 05-DEC-2002.
XX
XX 29-MAY-2002; 2002WO-US016840.
XX
XX 29-MAY-2001; 2001US-0294140P.
PR 06-JUN-2001; 2001US-0296249P.
PR 10-SEP-2001; 2001US-0318471P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Mcswiggen J;
XX
XX WPI; 2003-140484/13.
XX
XX Novel short interfering RNA and enzymatic nucleic acid useful for
PT treating cancer, modulates the expression of a nucleic acid encoding
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
XX Claim 4; Page 140; 185pp; English.
XX
XX The invention relates to a novel short interfering RNA (siRNA) nucleic
CC acid molecule or an enzymatic nucleic acid molecule, that modulates
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC acid molecule of the invention has cytostatic, anti-HIV, and anti-
CC rheumatic activity. The nucleic acid molecules are useful for reducing
CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC also useful for treating breast, ovarian, colorectal, lung, prostate,
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC ribozymes of the invention
XX
XX Sequence 17 BP; 4 A; 3 C; 8 G; 0 T; 2 U; 0 Other;
SQ
Query Match 0.6%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. NO. 2.3e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 1112 GTCCCGTGGCCAGTTCC 1128
Db 17 GTCCACGTGCCAGTTCC 1
RESULT 290
ACD59296
ID ACD59296 standard; RNA; 17 BP.
XX
XX AC ACD59296;
XX
XX 24-SEP-2003 (first entry)
XX
XX HCV DNazyme substrate sequence #1266.
XX
XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
XX RNA stability; RNA expression; RNA synthesis; antisense;
XX enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;
XX amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
XX HBV reverse transcriptase; Enhancer I region; viral replication;
XX degenerative; disease state; HBV infection; HCV infection; cirrhosis;
XX liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
XX virucide; antiinflammatory; substrate; ss.
XX
XX Hepatitis C virus.
XX
XX WO200281494-A1.
XX
XX 17-OCT-2002.
XX
XX 26-MAR-2002; 2002WO-US009187.
XX
XX 26-MAR-2001; 2001US-00817879.
PR 08-JUN-2001; 2001US-00877478.
PR 08-JUN-2001; 2001US-0296876P.
PR 24-OCT-2001; 2001US-0335059P.
PR 05-DEC-2001; 2001US-0337055P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX (BLAT/) BLATT L.
XX (MACE/) MACEJAK D.
XX (MCSW/) MCSWIGGEN J.
XX (MORR/) MORRISSEY D.
XX (PASC/) PAVCO P.
XX (LEBP/) LEE P.
XX (DRAP/) DRAPER K.
XX (ROBE/) ROBERTS E.
```

XX PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;  
 PI Draper K, Roberts E;  
 XX WPI; 2003-229207/22.  
 DR  
 XX Novel compound useful for treating cirrhosis, liver failure,  
 PT hepatocellular carcinoma, or condition associated with hepatitis C virus  
 PT infection.  
 XX  
 XX Claim 1; Page 256; 387pp; English.  
 PS  
 XX The present invention relates to nucleic acid molecules which modulate  
 CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or  
 CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense  
 CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,  
 CC inozymes, zinzymes, ambrzymes, and G-cleaver ribozymes. Also disclosed  
 CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse  
 CC transcriptase and/or HBV reverse transcriptase primer sequences, as well  
 CC as oligonucleotides that specifically bind the Enhancer I region of HBV  
 CC DNA. The nucleic acids may be used to modulate the expression of HBV  
 CC genes and HBV viral replication. Also disclosed is a method for screening  
 CC compounds and/or potential therapies directed against HBV, and compounds  
 CC that modulate the expression and/or replication of HCV. The compounds and  
 CC methods of the invention are useful for the treatment of degenerative and  
 CC disease states related to HBV and HCV infection, replication and gene  
 CC expression such as cirrhosis, liver failure, and hepatocellular  
 CC carcinoma. The present sequence represents a substrate for one of the HCV  
 CC DNazyme or minus strand DNazyme sequences disclosed in the present  
 CC invention  
 XX  
 SQ Sequence 17 BP; 3 A; 10 C; 2 G; 0 T; 2 U; 0 Other;  
 Query Match 0.6%; Score 13.8; DB 1; Length 17;  
 Best Local Similarity 82.4%; Pred. No. 2.3e+02;  
 Matches 14; Conservative 1; Mismatches 2; Indels 0; Gaps 0;  
 QY 1085 CAGGCTTCACCCCAAC 1101  
 DB 1 CAGGCTTCACCCCAAC 17  
 RESULT 291  
 AAQ70337  
 ID AAQ70337 standard; DNA; 18 BP.  
 XX  
 AC AAQ70337;  
 XX  
 DT 25-MAR-2003 (revised)  
 DT 15-FEB-1995 (first entry)  
 XX  
 DE Antisense oligonucleotide for human FGF.  
 XX  
 KW Fibroblast growth factor; hybridisation; laser procedures;  
 KW vascular smooth muscle cell; proliferation; SMC; vascular stenosis;  
 KW post angioplasty restenosis; atherosclerosis; cardiac hypertrophy;  
 KW organ transplant; ss.  
 OS Synthetic.  
 OS  
 XX WO9415945-A1.  
 FN  
 XX 21-JUL-1994.  
 PD  
 XX 28-DEC-1993; 93WO-US012600.  
 PF  
 XX 31-DEC-1992; 92US-00999706.  
 PR  
 XX (TEXA-) TEXAS BIOTECHNOLOGY CORP.  
 PA  
 XX Denner LA, Rege AA, Dixon RA;  
 PI  
 XX WPI; 1994-249123/30.  
 DR

XX  
 PT New anti-sense polynucleotide(s) to fibroblast growth factor receptor -  
 PT used for inhibiting vascular smooth muscle cell proliferation, partic.  
 PT for treating restenosis.  
 XX  
 XX Claim 3; Page 8; 53pp; English.  
 PS  
 XX The sequence is an antisense molecule directed against the gene for human  
 CC fibroblast growth factor 1. The polynucleotide can be used for inhibiting  
 CC vascular smooth muscle cell proliferation and for treating a disease e.g.  
 CC vascular stenosis, post angioplasty restenosis, atherosclerosis,  
 CC atherosclerosis, atrial venous shunt failure, cardiac hypertrophy,  
 CC vascular surgery and organ transplant. See also AAQ70333-60. (Updated on  
 CC 25-MAR-2003 to correct PN field.)  
 XX  
 SQ Sequence 18 BP; 4 A; 8 C; 2 G; 4 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 13.8; DB 1; Length 18;  
 Best Local Similarity 88.2%; Pred. No. 2.8e+02;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1134 CACCTCCAGCTCCACCT 1150  
 DB 1 2 CACTCCAGCTCCACAT 18  
 RESULT 292  
 AAQ02721  
 ID AAQ02721 standard; DNA; 18 BP.  
 XX  
 AC AAQ02721;  
 XX  
 DT 19-MAY-1998 (first entry)  
 XX  
 DE Human Class I HLA gene probe GE2-183.  
 XX  
 KW Human leukocyte antigen class I gene; allele testing; probe; donor;  
 KW tissue matching; recipient; graft rejection; class typing; ds.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 XX  
 FN WO9723645-A1.  
 PN  
 XX 03-JUL-1997.  
 PD  
 XX 04-JAN-1996; 96WO-US000362.  
 PF  
 XX 04-JAN-1996; 96WO-US000362.  
 PR  
 XX (SLOK ) SLOAN KETTERING INST CANCER RES.  
 PA  
 XX Yang SY, Cereb N;  
 PI  
 XX WPI; 1997-351080/32.  
 DR  
 XX DNA-based human leukocyte antigen class I gene typing method - useful for  
 PT tissue matching and prevention of graft versus host disease.  
 PT  
 XX Disclosure; Page 10; 89pp; English.  
 PS  
 XX AAQ02716-V02738 are hybridisation probes used in a novel method for  
 CC testing tissue samples to determine the allelic type of a human leukocyte  
 CC antigen (HLA) class I gene in the sample. The HLA Class I gene is  
 CC selected from among HLA-A, -B and -C genes. The method comprises of  
 CC treating the tissue sample to obtain nucleic acid polymers suitable for  
 CC amplification then combining these polymers with a first primer which  
 CC hybridises with a portion of intron 1 or intron 3 of the HLA Class I gene  
 CC and a second primer which hybridises with a different portion of the HLA  
 CC Class I gene under conditions suitable for amplification to obtain an  
 CC amplified product. The product is then evaluated to determine the allelic  
 CC type of the HLA-Class I gene. The method is useful for tissue matching  
 CC HLA class I antigens between donors and recipients and hence for

```

CC preventing graft versus host disease
SQ Sequence 18 BP; 7 A; 5 C; 6 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 13.8; DB 1; Length 18;
XX Best Local Similarity 88.2%; Pred. No. 2.8e+02;
XX Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 731 AGGAGAAACAGAACACC 747
DB 2 AGGAGACACGGAACACC 18
|||||
AAAF62369/C
ID AAF62369 standard; DNA; 18 BP.
XX
XX AAF62369;
XX
XX 06-JUN-2001 (first entry)
XX
XX DE Zinc finger coding sequence related oligo SEQ ID NO: 94.
XX
XX Leptin; human; LSR; lipolysis stimulated receptor; obesity; hypertension;
XX KW anorexia; cachexia; stroke; atherosclerosis; ds.
XX
XX OS Synthetic.
XX
XX WO200121647-A2.
XX PN
XX 29-MAR-2001.
XX PD
XX
XX 22-SEP-2000; 2000WO-IB001470.
XX PF
XX
XX 22-SEP-1999; 99US-0155506P.
XX PR
XX (GEST ) GENSET.
XX PA
XX
XX PI Yen F, Erickson MR, Fruebis J, Bihain B;
XX
XX WPI; 2001-218642/22.
XX
XX New leptin polypeptide fragment and related polynucleotides, useful for
XX PT the prevention and treatment of obesity and obesity-related diseases such
XX PT as hypertension and diabetes.
XX
XX Example 12; Page 245; 247pp; English.
XX
XX The present invention provides the protein and coding sequences of leptin
XX CC fragments which modulate the activity of lipolysis stimulated factor
XX CC (LSR). These sequences are useful in the treatment of obesity related
XX CC diseases, including obesity, anorexia, cachexia, cardiac and coronary
XX CC insufficiency, stroke, hypertension, atherosclerosis, atheromatous disease,
XX CC atherosclerosis, non-insulin dependent diabetes, hyperlipidaemia,
XX CC hyperuricaemia and syndrome X
XX
XX SQ Sequence 18 BP; 2 A; 3 C; 11 G; 2 T; 0 U; 0 Other;

Query Match 0.6%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 2.8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1235 CAGCCCTCGCTCCGAC 1251
DB 17 CAGCCCTCGCTCCGAC 1
|||||

RESULT 295
ABL43961
ID ABL43961 standard; DNA; 18 BP.
XX
XX ABL43961;
XX
XX 11-APR-2002 (first entry)
XX
XX Human chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
XX Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;

CC
CC The invention relates to a method (I) for testing a tissue sample to
CC determine the allelic type of a human leukocyte antigen (HLA) class I
CC gene in the sample, where the HLA class I gene is selected from HLA-A,
CC HLA-B or HLA-C, by: (a) treating the tissue sample to obtain nucleic acid
CC polymers suitable for amplification; (b) combining the nucleic acid
CC polymers with a primer which hybridizes with a portion of intron 1 or
CC intron 3 of the HLA class I gene, and a second primer which hybridizes
CC with a different portion of the HLA class I gene and performing
CC amplification, where the primers flank a region including at least one
CC site of allelic variation in at least one of exons 2 or 3 of the HLA
CC class I gene and where the first primer is a locus specific primer which
CC hybridizes with intron 1 or 3 of only one of the HLA class I genes; and
CC (c) evaluating the amplified product to determine the allelic type of the
CC HLA class I gene. The method is useful for testing a tissue sample to
CC determine the allelic type of a classical or non-classical HLA class I
CC gene in the sample. The sequences AAA11039-A11122 represent consensus
CC sequences of introns and exons of the HLA genes and primers and probes
CC used to isolate and analyse the HLA genes
XX
XX SQ Sequence 18 BP; 7 A; 5 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 0.6%; Score 13.8; DB 1; Length 18;

```

KW PCR primer; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN JP2001321190-A.  
 XX  
 PD 20-NOV-2001.  
 XX  
 PF 12-MAR-2001; 2001JP-00068285.  
 XX  
 PR 10-MAR-2000; 2000JP-00066716.  
 XX  
 PA (RIKA ) RIKAGAKU KENKYUSHO.  
 XX (GENO-) GENOTEX YG.  
 XX WPI; 2002-144136/19.  
 DR  
 XX  
 PT Arraying genome clones.  
 XX  
 PS Claim 4; Page 24; 528pp; Japanese.  
 XX  
 CC The present invention describes a method of arraying genome clones. The method comprises: (a) clones of the genomic libraries contained in multiwell plates numbered for discrimination are mixed in each of the multiwell plates; (b) a primer designed based on the chromosome marker sequence is added to the mixture to carry out an amplification reaction; (c) a signal corresponding to the marker is detected from the resultant amplified product to specify the discrimination Nos. of the multiwell plates containing the clones having said marker sequence; (d) the order of the markers is changed so that the same discrimination Nos. succeed to the maximum in the specified discrimination Nos. to array the multiwell plates; (e) the clones in the multiwell plates of the specified discrimination Nos. are mixed respectively in each wells of longitudinal and lateral directions; (f) the mixed clones are cultured and the resultant cultures are amplified by using the above primer; (g) signals are detected from the amplified products; (h) the clones in the multiwell plates are specified from the detected result; and (i) the clones are reconstituted as the positions on the chromosome and arrayed. The microarray is useful for gene analysis. ABL42957 to ABL45322 represent PCR primers for human chromosome 1p36-15 DNA, and ABL45323 to ABL45634 represent PCR primers for human chromosome 21q22.1, which are specifically claimed for use in the present invention.

XX Sequence 18 BP; 3 A; 3 C; 9 G; 3 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.6%; Score 13.8; DB 1; Length 18;  
 Best Local Similarity 88.2%; Pred. No. 2.8e+02;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 858 TGTAAAGGGCACTGAGG 874  
 ||| |||||  
 Db 2 TGTGGAGGGCACTGAGG 18  
 ||| |||||  
 RESULT 296  
 AAC91644/c  
 ID AAC91644 standard; DNA; 19 BP.  
 XX  
 AC AAC91644;  
 XX  
 DT 16-MAR-2001 (first entry)  
 XX  
 DE Human angiotensinogen gene exon 2 PCR primer, SEQ ID NO:46.  
 XX  
 KW Human angiotensinogen gene; AGT; insulin-dependent diabetes mellitus;  
 KW type 1 diabetes; chromosome 1q42-43; single nucleotide polymorphism;  
 KW IDDM; SNP; diagnosis; susceptibility; transgenic animal; drug screening;  
 KW antidiabetic; gene therapy; exon 2; PCR primer; ss.  
 XX  
 OS Homo sapiens.  
 XX WC200071751-A1.  
 XX

PD 30-NOV-2000.  
 XX  
 PF 16-MAY-2000; 2000WO-US013327.  
 XX  
 PR 21-MAY-1999; 99US-0135423P.  
 PR 06-JAN-2000; 2000US-0174700P.  
 XX  
 XX (MYRI-) MYRIAD GENETICS INC.  
 XX  
 XX McGrail M, Russell DL, Shattuck DM;  
 PI WPI; 2001-025172/03.  
 DR  
 XX  
 PT Novel angiotensinogen gene, mutant alleles of which causes susceptibility to insulin-dependent diabetes mellitus useful for diagnosis of predisposition to diabetes.  
 PT  
 XX  
 PS Example 2; Page 33; 83pp; English.  
 XX  
 CC The invention relates to the human angiotensinogen (AGT) gene, some mutant alleles of which cause a susceptibility to insulin-dependent diabetes mellitus (IDDM, type 1 diabetes). The AGT gene is located on chromosome 1q42-43, a region linked to IDDM. The invention discloses genomic sequences comprising exons 1-5 of the human AGT gene (AAC91600-C91604) and a genomic sequence comprising an alternative AGT gene exon 1 (AAC91606). The invention also encompasses the specifically claimed human AGT mutant nucleic acid sequences AAC91667-C91684, and the mutant angiotensinogen proteins AAB48945-B48949. The invention also relates to detecting mutant AGT alleles or gene products thereof which are related to IDDM; determining whether a person has, or is at risk of developing diabetes via detection of a polymorphism in the AGT gene; and methods of screening for drug candidates which may be useful in the treatment of diabetes resulting from an AGT mutation. Methods of preventing or treating diabetes are claimed which comprise the administration of a compound which agonises or antagonises wild-type or mutant AGT, which agonises or antagonises an AGT receptor, which inhibits AGT gene expression, or which cleaves AGT proteins. In addition, the invention encompasses a transgenic non-human animal, or cell line derived therefrom, comprising a mutant human AGT allele. The polymorphisms identified in the AGT gene are useful for determining if a person has, or is at risk from developing insulin-dependent diabetes mellitus. AGT modulators can be used to treat or prevent diabetes. Mutant AGT proteins or fragments thereof are useful for screening compounds which bind to AGT polypeptides. The present sequence represents a human AGT gene exon 2 PCR primer used in an exemplification of the invention.

XX Sequence 19 BP; 3 A; 7 C; 4 G; 5 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.6%; Score 13.8; DB 1; Length 19;  
 Best Local Similarity 88.2%; Pred. No. 3.3e+02;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1263 CCCCTTCGAGAGTGGG 1279  
 ||| |||||  
 Db 19 CACCCTTGAGAGTGGG 3  
 ||| |||||  
 RESULT 297  
 AAC91646/c  
 ID AAC91646 standard; DNA; 19 BP.  
 XX  
 AC AAC91646;  
 XX  
 DT 16-MAR-2001 (first entry)  
 XX  
 DE Human angiotensinogen gene exon 2 PCR primer, SEQ ID NO:48.  
 XX  
 KW Human angiotensinogen gene; AGT; insulin-dependent diabetes mellitus;  
 KW type 1 diabetes; chromosome 1q42-43; single nucleotide polymorphism;  
 KW IDDM; SNP; diagnosis; susceptibility; transgenic animal; drug screening;  
 KW antidiabetic; gene therapy; exon 2; PCR primer; ss.  
 XX  
 OS Homo sapiens.  
 XX



```

KW neovascular condition of the retina; ss.
XX
XX Homo sapiens.
OS
FN WO200078341-A1.
XX
PD 28-DEC-2000.
XX
PF 21-JUN-2000; 2000WO-AU0000693.
XX
PR 21-JUN-1999; 99US-0140345P.
XX
PA (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI Wright CJ, Werther GA, Edmondson SR;
XX
DR WPI; 2001-041421/05.
XX
PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT inhibits or reduces growth factor mediated cell proliferation and/or
PT inflammation.
XX
PS Example 7; Page 53; 201pp; English.
XX
CC The present invention relates to a method for ameliorating the effects of
CC skin disorders. The method comprises contacting the skin with an
CC antisense oligonucleotide, [for insulin-like Growth Factor [IGF]-1
CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3], which is capable of
CC inhibiting or reducing growth factor mediated cell proliferation,
CC inflammation and/or other disorders. The present sequence is an
CC oligonucleotide which can be used to design the antisense
CC oligonucleotides of the present invention (see AAP45151 and AAP45153-
CC F45161). The method is useful for ameliorating the effects of psoriasis,
CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC hyperneovascular condition such as a neovascular condition of the retina,
CC brain or skin, growth factor-mediated malignancies, other sclerotic
CC disease, kidney disease, hyperproliferation of the inside of blood
CC vessels or any other hyperplasia
XX
SQ Sequence 15 BP; 3 A; 9 C; 1 G; 2 T; 0 U; 0 Other;

Query Match 0.6%; Score 13.4; DB 1; Length 15;
Best Local Similarity 93.3%; Pred. No. 2e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1085 CAGGCTTCACCCCA 1099
Db 1 CACGCTTCACCCCA 15

RESULT 300
AAF47945
ID AAF47945 standard; DNA; 15 BP.
XX
AC AAF47945;
XX
XX 30-MAR-2001 (first entry)
DT
DE IGFBP3 oligonucleotide #1365.
XX
XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
XX cyostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
XX skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
XX IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
XX growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
XX keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
XX hyperneovascular condition; hyperplasia; kidney disease;
XX neovascular condition of the retina; ss.
OS
XX Homo sapiens.
XX

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FN WO200078341-A1.
XX
XX 28-DEC-2000.
XX
PF 21-JUN-2000; 2000WO-AU0000693.
XX
PR 21-JUN-1999; 99US-0140345P.
XX
PA (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI Wright CJ, Werther GA, Edmondson SR;
XX
DR WPI; 2001-041421/05.
XX
PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT inhibits or reduces growth factor mediated cell proliferation and/or
PT inflammation.
XX
PS Example 7; Page 53; 201pp; English.
XX
CC The present invention relates to a method for ameliorating the effects of
CC skin disorders. The method comprises contacting the skin with an
CC antisense oligonucleotide, [for insulin-like Growth Factor [IGF]-1
CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3], which is capable of
CC inhibiting or reducing growth factor mediated cell proliferation,
CC inflammation and/or other disorders. The present sequence is an
CC oligonucleotide which can be used to design the antisense
CC oligonucleotides of the present invention (see AAP45151 and AAP45153-
CC F45161). The method is useful for ameliorating the effects of psoriasis,
CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC hyperneovascular condition such as a neovascular condition of the retina,
CC brain or skin, growth factor-mediated malignancies, other sclerotic
CC disease, kidney disease, hyperproliferation of the inside of blood
CC vessels or any other hyperplasia
XX
SQ Sequence 15 BP; 2 A; 9 C; 1 G; 3 T; 0 U; 0 Other;

Query Match 0.6%; Score 13.4; DB 1; Length 15;
Best Local Similarity 93.3%; Pred. No. 2e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1088 GCTTCACCCCA 1102
Db 1 GCTTCACCCCA 15

RESULT 301
AAD40403
ID AAD40403 standard; DNA; 15 BP.
XX
AC AAD40403;
XX
XX 22-OCT-2002 (first entry)
DT
DE Bovine DGAT1 cDNA polymorphic variant specific probe, Dgatless66 (VIC).
XX
XX Bovine; diacylglycerol acyltransferase; genotyping; milk production;
XX DGAT1; polymorphism; farming industry; transgenic; probe; ss.
XX
XX Bos taurus.
XX
XX WO200236824-A1.
XX
XX 10-MAY-2002.
XX
XX 31-OCT-2001; 2001WO-NZ000245.
XX
XX 31-OCT-2000; 2000NZ-00507888.
XX
XX 06-DEC-2000; 2000NZ-00508662.
XX
XX (GEOR/) GEORGES M A J.
XX

```



PA (COPP/) COPPIETERS W H R.  
 PA (GRIS/) GRISART B M J.  
 PA (SNEL/) SNELL R G.  
 PA (REID/) REID S J.  
 PA (FORD/) FORD C A.  
 PA (SPEL/) SPELMAN R J.  
 XX  
 XX Georges MAJ, Coppieters WHR, Grisart BMJ, Snell RG, Reid SJ;  
 PI Ford CA, Spelman RJ;  
 XX  
 XX WPI; 2002-500128/53.  
 XX  
 XX Determining genetic merit of a bovine with respect to milk composition  
 PT and volume for improved milk production, comprises determining the  
 PT diacylglycerol acyltransferase gene genotypic state of the bovine.  
 XX  
 XX Disclosure; Page 59; 128pp; English.  
 XX  
 CC The invention relates to a method of genotyping bovine for improved milk  
 CC production traits which comprises determining the diacylglycerol  
 CC acyltransferase (DGAT1) genotypic state of the bovine, wherein the DGAT1  
 CC gene and polymorphisms have been found to be associated with such  
 CC improved milk production traits. The method is useful for selecting a  
 CC bovine having a desired DGAT1 genotypic state. It is also useful for the  
 CC identification and selection of a bovine having one of the polymorphisms  
 CC in its DGAT1 gene. Milk produced from selected bovine which is useful for  
 CC making a dairy product provides a beneficial health effect. An antibody  
 CC to the protein having DGAT1 activity is useful for inhibiting the  
 CC activity of bovine DGAT1 in a lactating bovine so as to modulate milk  
 CC production and/or milk solids content. DGAT1 nucleic acid and its  
 CC fragments are useful in the farming industry. They are also useful to  
 CC generate transgenic animals which are useful to investigate the molecular  
 CC basis of DGAT1 action and to test a substance for the ability to prevent,  
 CC slow or enhance DGAT1 activity. The present sequence is bovine DGAT1 cDNA  
 CC polymorphic variant specific probe used to illustrate the method of the  
 CC invention  
 XX  
 XX Sequence 15 BP; 1 A; 10 C; 1 G; 3 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.6%; Score 13.4; DB 1; Length 15;  
 Best Local Similarity 93.3%; Pred. No. 2e+02;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1089 CTTCAACCCCAACCT 1103  
 Db 1 CTTGCGCCCAACCT 15  
 XX  
 XX RESULT 302  
 XX ABA02425/c  
 XX ID ABA02425 standard; DNA; 16 BP.  
 XX AC ABA02425;  
 XX  
 XX 29-AUG-2003 (revised)  
 DT 04-MAR-2002 (first entry)  
 XX  
 XX Type B ammonia-oxidising bacterium 16S rRNA gene reverse PCR primer.  
 DE  
 XX  
 XX Type B; ammonia-oxidising bacterium; AOB; nitrite; 16S rRNA gene;  
 KW ribosomal RNA; aquarium; aquaculture; waste water treatment;  
 KW bioremediation; PCR primer; ss.  
 XX  
 XX Nitrosomonadales.  
 OS  
 XX  
 XX W0200190312-A1.  
 PN  
 XX  
 XX 29-NOV-2001.  
 PD  
 XX  
 XX 17-MAY-2001; 2001WO-US016265.  
 PF  
 XX  
 XX 19-MAY-2000; 2000US-00573684.  
 PR  
 XX

PA (AQUA-) AQUARIA INC.  
 XX  
 XX Hovanec TA, Burrell PC;  
 XX  
 XX WPI; 2002-075367/10.  
 DR  
 XX  
 XX New bacteria capable of oxidizing ammonia to nitrite, for preventing or  
 PT alleviating the accumulation of ammonia in fresh water aquaria, seawater  
 PT aquaria and waste water.  
 PT  
 XX  
 XX Example; Page 10; 62pp; English.  
 PS  
 XX  
 XX The invention relates to 4 novel types of ammonia-oxidising bacteria  
 CC (AOB) found in freshwater aquaria. The bacteria are able to oxidise  
 CC ammonia to nitrite and are members of the ammonia-oxidising bacteria  
 CC family of the beta subdivision of Proteobacteria. The 4 types of bacteria  
 CC can be distinguished on the basis of their 16S rRNA (ribosomal RNA) gene  
 CC sequences (ABA02416-ABA02419), and are classified as AOB type A (e.g.,  
 CC R7clone140), type A1 (e.g., R7clone187), type B (e.g., R3clone5) and type  
 CC C (e.g., R3clone47). The invention also encompasses isolated 16S rRNA  
 CC gene sequences of the ammonia-oxidising bacteria of the invention,  
 CC oligonucleotide probes and primers for the detection of these bacteria,  
 CC and compositions comprising the bacteria. The bacteria of the invention  
 CC are useful in biological filters for reducing ammonia accumulation in  
 CC both freshwater and seawater aquaria. They may also be used in waste  
 CC water treatment and in bioremediation processes to reduce the level of  
 CC pollution caused by ammonia. Sequences ABA02424-ABA02425 represent PCR  
 CC primers for the detection of the 16S rRNA gene sequence of the type B  
 CC ammonia-oxidising bacterium (ABA02418). (Updated on 29-AUG-2003 to  
 CC standardise OS field)  
 XX  
 XX Sequence 16 BP; 1 A; 8 C; 4 G; 2 T; 0 U; 1 Other;  
 SQ  
 Query Match 0.6%; Score 13.4; DB 1; Length 16;  
 Best Local Similarity 93.3%; Pred. No. 2.4e+02;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1184 CCCGACAGAGAGTGG 1198  
 Db 15 CCCGACAGAGAGTGG 1  
 XX  
 XX RESULT 303  
 XX AAC72252/c  
 XX ID AAC72252 standard; DNA; 17 BP.  
 XX AC AAC72252;  
 XX  
 XX 09-FEB-2001 (first entry)  
 DT  
 XX  
 XX Single nucleotide polymorphism PCR primer #1388.  
 DE  
 XX  
 XX Single nucleotide polymorphism; SNP; human; genetic disease;  
 KW disease susceptibility; cardiovascular system; endocrine system;  
 KW neurological system; forensic testing; paternity testing; PCR primer; ss.  
 XX  
 XX Homo sapiens.  
 OS  
 XX  
 XX W0200058519-A2.  
 PN  
 XX  
 XX 05-OCT-2000.  
 PD  
 XX  
 XX 30-MAR-2000; 2000WO-US008440.  
 PF  
 XX  
 XX 31-MAR-1999; 99US-0127248P.  
 PR  
 XX  
 XX (WHEE) WHITEHEAD INST BIOMEDICAL RES.  
 PA (AFFY-) AFFYMETRIX INC.  
 PA  
 XX  
 XX Altschuler D, Cargill M, Daley GQ, Ireland JS, Lander ES;  
 PI Lipshutz RJ, Patil N, Sklar P;  
 XX  
 XX WPI; 2000-611722/58.  
 DR

XX Nucleic acid selected from one of 106 genes comprising single nucleotide  
PT polymorphisms, allele-specific oligonucleotides to the genes are useful  
PT for phenotypic correlations, forensics, paternity testing, medicine and  
PT genetic analysis.  
XX Claim 8; Fig 5; 214pp; English.  
XX The present invention is concerned with a number of human single  
CC nucleotide polymorphisms (SNPs) which the inventors identified in human  
CC genes. These SNPs can be used in disease diagnosis and prediction of an  
CC individual's susceptibility to disease, in forensic and paternity testing  
CC and in genetic mapping. In particular, the SNPs of the invention can be  
CC used to diagnose susceptibility to diseases of the cardiovascular,  
CC endocrine and neurological systems, such as coronary artery disease,  
CC schizophrenia, cancer, autoimmune diseases, Alzheimer's and Parkinson's  
CC diseases  
XX Sequence 17 BP; 3 A; 4 C; 7 G; 3 T; 0 U; 0 Other;  
SQ  
Query Match 0.6%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 2.9e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 1073 TCAGTCCCACTCCAG 1087  
Db 15 TGAGTCCCACTCCAG 1  
RESULT 304  
AAC72258/c  
ID AAC72258 standard; DNA; 17 BP.  
XX AC AAC72258;  
XX DT 09-FEB-2001 (first entry)  
XX DE Single nucleotide polymorphism PCR primer #1392.  
XX KW Single nucleotide polymorphism; SNP; human; genetic disease;  
XX KW disease susceptibility; cardiovascular system; endocrine system;  
XX KW neurological system; forensic testing; paternity testing; PCR primer; ss.  
XX OS Homo sapiens.  
XX PN WO200058519-A2.  
XX PD 05-OCT-2000.  
XX PF 30-MAR-2000; 2000WO-US008440.  
XX PR 31-MAR-1999; 99US-0127248P.  
XX PA (WHED ) WHITEHEAD INST BIOMEDICAL RES.  
XX PA (AFY-) AFYMETRIX INC.  
XX PI Altschuler D, Cargill M, Daley GQ, Ireland JS, Lander ES;  
XX PI Lipshutz RJ, Patil N, Sklar P;  
XX DR WPI; 2000-611722/58.  
XX Nucleic acid selected from one of 106 genes comprising single nucleotide  
PT polymorphisms, allele-specific oligonucleotides to the genes are useful  
PT for phenotypic correlations, forensics, paternity testing, medicine and  
PT genetic analysis.  
XX Claim 8; Fig 5; 214pp; English.  
XX The present invention is concerned with a number of human single  
CC nucleotide polymorphisms (SNPs) which the inventors identified in human  
CC genes. These SNPs can be used in disease diagnosis and prediction of an  
CC individual's susceptibility to disease, in forensic and paternity testing  
CC and in genetic mapping. In particular, the SNPs of the invention can be

CC used to diagnose susceptibility to diseases of the cardiovascular,  
CC endocrine and neurological systems, such as coronary artery disease,  
CC schizophrenia, cancer, autoimmune diseases, Alzheimer's and Parkinson's  
CC diseases  
XX Sequence 17 BP; 3 A; 4 C; 7 G; 3 T; 0 U; 0 Other;  
SQ  
Query Match 0.6%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 2.9e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 1073 TCAGTCCCACTCCAG 1087  
Db 15 TGAGTCCCACTCCAG 1  
RESULT 305  
AAF07186  
ID AAF07186 standard; DNA; 17 BP.  
XX AC AAF07186;  
XX DT 16-FEB-2001 (first entry)  
XX DE Hammerhead ribozyme substrate #3443.  
XX KW Ribozyme; erythropoietin; granulocyte colony stimulating factor;  
XX KW interferon alpha; ss.  
XX OS Homo sapiens.  
XX PN WO200061729-A2.  
XX PD 19-OCT-2000.  
XX PF 11-APR-2000; 2000WO-US009721.  
XX PR 12-APR-1999; 99US-0129390P.  
XX PA (RIBO-) RIBOZYME PHARM INC.  
XX PI Blatt L, Zwick M, Pavco P, Mcswiggen J;  
XX DR WPI; 2000-647423/62.  
XX PT Enzymatic and antisense nucleic acid inhibition of repressor genes.  
XX PT useful for producing e.g. granulocyte colony stimulating factor protein,  
XX PT interferon alpha and erythropoietin.  
XX PS Claim 54; Page 135; 164pp; English.  
XX CC The present invention relates to enzymatic and antisense nucleic acid  
CC molecules that act as inhibitors of the expression of repressor genes  
CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription  
CC factor gene, IRF-2 and/or the C/EBP Displacement Protein (CDP).  
CC Inhibition of the repressors removes prevents inhibition (and  
CC consequently increases expression of) genes involved in the production of  
CC erythropoietin, granulocyte colony stimulating factor protein and  
CC interferon alpha  
XX Sequence 17 BP; 3 A; 8 C; 2 G; 4 T; 0 U; 0 Other;  
SQ  
Query Match 0.6%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 2.9e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 1065 CCCAAGCTTCAGTCC 1079  
Db 1 CCCAAGCTTCAGTCC 15  
RESULT 306  
ABK02377/c

ID ABK02377 standard; RNA; 17 BP.  
 AC ABK02377;  
 XX  
 DT 12-MAR-2002 (first entry)  
 DE Human NOGO Amberzyme #49.  
 XX  
 KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;  
 KW cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;  
 KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;  
 KW DNzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;  
 KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;  
 KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;  
 KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;  
 KW inflammatory arthropathy; central nervous system injury;  
 KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;  
 KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;  
 KW Parkinson's disease; ataxia; Huntington's disease;  
 KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.  
 XX  
 OS Homo sapiens.  
 OS Synthetic.  
 XX  
 PN WO200159103-A2.  
 XX  
 PD 16-AUG-2001.  
 XX  
 PF 09-FEB-2001; 2001WO-US004273.  
 XX  
 PR 11-FEB-2000; 2000US-0181797P.  
 PR 28-FEB-2000; 2000US-0185516P.  
 PR 06-MAR-2000; 2000US-0187128P.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 PA (BLAT/) BLATT L.  
 PA (MCSW/) MCSWIGGEN J.  
 PA (CHOW/) CHOWRIRA B M.  
 XX  
 PI Blatt L, Mcswiggen J, Chowrira BM;  
 XX WPI; 2001-607195/69.  
 DR  
 XX  
 PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and central nervous system injury.  
 PT  
 PS Claim 88; Page 131; 200pp; English.  
 XX  
 CC The invention relates to a nucleic acid molecule which down regulates expression of a CD20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (NOGO). The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a DNzyme) an inozyme (an endolytic nucleic acid cleaving an RNA molecule possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA of CD20 in the presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, it may be contacted with a cell to reduce CD20 activity of the cell and treat a patient having a condition associated with the level of CD20. The treatment may further comprise the use of one or more therapies. In particular, the CD20 targeting nucleic acid may be used to treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma, immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-targeting nucleic acid is used to cleave RNA of the NOGO gene in the presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, the nucleic acid may be contacted with a cell to reduce NOGO activity of the cell and treat a patient having a condition associated with the level of NOGO. The treatment may further comprise the use of one or more

CC therapies. In particular, the NOGO-targeting nucleic acid may be used to treat central nervous system (CNS) injury and cerebrovascular accident (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS), chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS), Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob disease, muscular dystrophy, and/or other neurodegenerative disease states which respond to the modulation of NOGO expression. The present sequence is an amberzyme molecule of the invention  
 XX  
 SQ Sequence 17 BP; 3 A; 2 C; 9 G; 0 T; 3 U; 0 Other;  
 Query Match 0.6%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 93.3%; Pred. No. 2.9e+02;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 Qy 1134 CACCTCCAGCTCCAC 1148  
 Db 15 CACCTCCAGCTCCCTC 1  
 RESULT 307  
 ABK01806/c  
 ID ABK01806 standard; RNA; 17 BP.  
 XX  
 AC ABK01806;  
 XX  
 DT 12-MAR-2002 (first entry)  
 XX  
 DE Human NOGO Zinzyme #128.  
 XX  
 KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;  
 KW cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;  
 KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;  
 KW DNzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;  
 KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;  
 KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;  
 KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;  
 KW inflammatory arthropathy; central nervous system injury;  
 KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;  
 KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;  
 KW Parkinson's disease; ataxia; Huntington's disease;  
 KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.  
 XX  
 OS Homo sapiens.  
 OS Synthetic.  
 XX  
 PN WO200159103-A2.  
 XX  
 PD 16-AUG-2001.  
 XX  
 PF 09-FEB-2001; 2001WO-US004273.  
 XX  
 PR 11-FEB-2000; 2000US-0181797P.  
 PR 28-FEB-2000; 2000US-0185516P.  
 PR 06-MAR-2000; 2000US-0187128P.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 PA (BLAT/) BLATT L.  
 PA (MCSW/) MCSWIGGEN J.  
 PA (CHOW/) CHOWRIRA B M.  
 XX  
 PI Blatt L, Mcswiggen J, Chowrira BM;  
 XX WPI; 2001-607195/69.  
 DR  
 XX  
 PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and central nervous system injury.  
 PT  
 PS Claim 88; Page 98; 200pp; English.  
 XX  
 CC The invention relates to a nucleic acid molecule which down regulates

expression of a CD20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (NOGO). The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a DNzyme) an inozyme (an endolytic nucleic acid cleaving a RNA molecule possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or an amberzyme (cleaving RNA with an NGN triplet), a zynzyme (cleaving RNA with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA of CD20 in the presence of a divalent cation that is preferably  $Mg^{2+}$ . Furthermore, it may be contacted with a cell to reduce CD20 activity of the cell and treat a patient having a condition associated with the level of CD20. The treatment may further comprise the use of one or more therapies. In particular, the CD20 targeting nucleic acid may be used to treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma, immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-targeting nucleic acid is used to cleave RNA of the NOGO gene in the presence of a divalent cation that is preferably  $Mg^{2+}$ . Furthermore, the nucleic acid may be contacted with a cell to reduce NOGO activity of the cell and treat a patient having a condition associated with the level of NOGO. The treatment may further comprise the use of one or more therapies. In particular, the NOGO-targeting nucleic acid may be used to treat central nervous system (CNS) injury and cerebrovascular accident (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS), chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS), Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob disease, muscular dystrophy, and/or other neurodegenerative disease states which respond to the modulation of NOGO expression. The present sequence is a zynzyme molecule of the invention

Sequence 17 BP; 3 A; 2 C; 9 G; 0 T; 3 U; 0 Other;

Query Match 0.6%; Score 13.4; DB 1; Length 17;

Best Local Similarity 93.3%; Pred. No. 2.9e+02; Mismatches 1; Indels 0; Gaps 0;

QY 1135 ACCTCCAGCTCCACC 1149

DB 17 ACCTCCAGCTCTCC 3

RESULT 308

ABA77714

ID ABA77714 standard; DNA; 17 BP.

AC ABA77714;

XX 24-JAN-2002 (first entry)

DE Retinoblastoma mutation correcting oligonucleotide SEQ ID NO: 560.

Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin; retinoblastoma; BRCA1; BRCA2; CPTF; cystic fibrosis; cancer; Factor V; cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2; adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis; haemophilia; alpha thalassemia; haemoglobin alpha locus 1; MLH1; APOE; mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR; familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense; UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1; Alzheimer's disease; cytosolic; antisticking; antianaemic; haemostatic; antilipemic; ss.

OS Homo sapiens.

XX WO200173002-A2.

PN 04-OCT-2001.

XX 27-MAR-2001; 2001WO-US009761.

XX 27-MAR-2000; 2000US-0192176P.

XX 27-MAR-2000; 2000US-0192179P.

PR 01-JUN-2000; 2000US-0208538P.  
PR 30-OCT-2000; 2000US-0244989P.  
XX (UYDE ) UNIV DELAWARE.  
XX Kmiec EB, Gamper HB, Rice MC;  
XX WPI; 2001-639230/73.

Oligonucleotide for targeted alterations of genetic sequences and for treating cystic fibrosis, comprises at least one mismatch and chemical modification.

Claim 7; Page 77; 294pp; English.

The present invention provides single-stranded oligonucleotides which can be used for the targeted alteration of genomic sequences, where the oligonucleotide has at least one mismatch compared with the genomic sequence to be altered. In particular, these sequences are directed at the following genes: adenosine deaminase, p53, beta-globin, retinoblastoma, BRCA1, BRCA2, CPTF, cyclin-dependent kinase inhibitor 2A (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6, apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and presenilin-2 (PSEN2). These can be used in the gene therapy of diseases such as cancer, adenosine deaminase deficiency, cystic fibrosis, haemophilia, hypercholesterolaemia, thalassemia, sickle cell anaemia, Alzheimer's disease, melanoma, adenomatous polyposis of the colon and various syndromes. The present sequence is one of the gene correcting oligonucleotides of the invention

Sequence 17 BP; 5 A; 4 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.6%; Score 13.4; DB 1; Length 17;

Best Local Similarity 93.3%; Pred. No. 2.9e+02; Mismatches 1; Indels 0; Gaps 0;

QY 953 TGTATCGCTACCAAC 967

DB 3 TGTATCGCTACCAAC 17

RESULT 309

ABA77713/c

ID ABA77713 standard; DNA; 17 BP.

XX ABA77713;

XX 24-JAN-2002 (first entry)

DE Retinoblastoma mutation correcting oligonucleotide SEQ ID NO: 559.

Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin; retinoblastoma; BRCA1; BRCA2; CPTF; cystic fibrosis; cancer; Factor V; cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2; adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis; haemophilia; alpha thalassemia; haemoglobin alpha locus 1; MLH1; APOE; mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR; familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense; UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1; Alzheimer's disease; cytosolic; antisticking; antianaemic; haemostatic; antilipemic; ss.

OS Homo sapiens.

XX WO200173002-A2.

PN 04-OCT-2001.

XX 27-MAR-2001; 2001WO-US009761.

XX 27-MAR-2000; 2000US-0192176P.

```

PR 27-MAR-2000; 2000US-0192179P.
PR 01-JUN-2000; 2000US-0208538P.
PR 30-OCT-2000; 2000US-0244989P.
XX
XX (UYDE ) UNIV DELAWARE.
XX
XX Kmiec EB, Gamper HB, Rice MC;
XX
XX WPI; 2001-639230/73.
XX
XX Oligonucleotide for targeted alterations of genetic sequences and for
XX treating cystic fibrosis, comprises at least one mismatch and chemical
XX modification.
XX
XX Claim 7; Page 77; 294pp; English.
XX
XX The present invention provides single-stranded oligonucleotides which can
XX be used for the targeted alteration of genomic sequences, where the
XX oligonucleotide has at least one mismatch compared with the genomic
XX sequence to be altered. In particular, these sequences are directed at
XX the following genes: adenosine deaminase, p53, beta-globin,
XX retinoblastoma, BRCAL, BRCA2, CTRK, cyclin-dependent kinase inhibitor 2A
XX (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus
XX 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
XX apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
XX (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
XX presenilin-2 (PSEN2). These can be used in the gene therapy of diseases
XX such as cancer, adenosine deaminase deficiency, cystic fibrosis,
XX haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,
XX Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
XX various syndromes. The present sequence is one of the gene correcting
XX oligonucleotides of the invention
XX
XX Sequence 17 BP; 6 A; 2 C; 4 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 13.4; DB 1; Length 17;
XX Best Local Similarity 93.3%; Pred. No. 2.9e+02;
XX Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 953 TGTATCGCTACCAAC 967
XX 15 TGTATCGCTACCAAC 1
XX
XX Db
XX
XX RESULT 310
XX ID ABN00981 standard; DNA; 17 BP.
XX AC ABN00981;
XX
XX DT 29-MAY-2002 (first entry)
XX
XX DE Human GDMPLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:973.
XX
XX Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
XX muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
XX skeletal muscle disorder; amplicon; screening; ss.
XX
XX Homo sapiens.
XX
XX WO200192524-A2.
XX
XX 06-DEC-2001.
XX
XX 25-MAY-2001; 2001WO-US016981.
XX
XX 26-MAY-2000; 2000US-0207456P.
XX
XX 21-SEP-2000; 2000US-0234687P.
XX
XX 27-SEP-2000; 2000US-0236359P.
XX
XX 04-OCT-2000; 2000GB-00024263.
XX
XX 30-JAN-2001; 2001WO-US000661.
XX
XX 30-JAN-2001; 2001WO-US000662.
XX
XX 30-JAN-2001; 2001WO-US000663.
XX

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PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 05-FEB-2001; 2001US-0266860P.
XX
XX (AEOM-) ABOMICA INC.
XX
XX Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX WPI; 2002-179446/23.
XX
XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
XX or as specific biomolecule capture probes for surface-enhanced laser
XX desorption ionization, comprises human myosin-like protein hGDMPLP-1.
XX
XX Disclosure; SEQ ID NO 973; 214pp; English.
XX
XX The present invention describes a human genome-derived myosin-like
XX protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
XX 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
XX nucleic acids can be used as probes to detect, characterise and quantify
XX hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
XX provide initial substrates for the recombinant engineering of hGDMPLP-1
XX protein variants having desired phenotypic improvements, and for
XX expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
XX used as immunogens to raise antibodies that specifically recognise hGDMPLP
XX -1 proteins, as standards in assays used to determine the concentration
XX and/or amount specifically of hGDMPLP proteins, as specific biomolecule
XX capture probes for surface-enhanced laser desorption ionisation, as
XX therapeutic supplement in patients having specific deficiency in hGDMPLP-1
XX production, and in vaccines or for replacement therapy. The
XX polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
XX disorder associated with the expression of hGDMPLP-1, in particular heart
XX and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
XX The present sequence represents an oligomer used in the screening of the
XX hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
XX The sequence data for this patent did not form part of the printed
XX specification, but was obtained in electronic format directly from WIPO
XX at ftp.wipo.int/pub/published_pct_sequence
XX
XX Sequence 17 BP; 5 A; 7 C; 5 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 13.4; DB 1; Length 17;
XX Best Local Similarity 93.3%; Pred. No. 2.9e+02;
XX Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 1056 GGCCCCCAACCCCAAG 1070
XX 2 GGCCCCCAACCCCAAG 16
XX
XX Db
XX
XX RESULT 311
XX ID ABN00982
XX
XX ID ABN00982 standard; DNA; 17 BP.
XX
XX AC ABN00982;
XX
XX DT 29-MAY-2002 (first entry)
XX
XX DE Human GDMPLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:974.
XX
XX Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
XX muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
XX skeletal muscle disorder; amplicon; screening; ss.
XX
XX Homo sapiens.
XX
XX WO200192524-A2.
XX
XX

```

PD 06-DEC-2001.  
XX 25-MAY-2001; 2001WO-US016981.  
XX 26-MAY-2000; 2000US-0207456P.  
XX 21-SEP-2000; 2000US-0234687P.  
XX 27-SEP-2000; 2000US-0236359P.  
XX 04-OCT-2000; 2000GB-00024263.  
XX 30-JAN-2001; 2001WO-US000661.  
XX 30-JAN-2001; 2001WO-US000662.  
XX 30-JAN-2001; 2001WO-US000663.  
XX 30-JAN-2001; 2001WO-US000664.  
XX 30-JAN-2001; 2001WO-US000665.  
XX 30-JAN-2001; 2001WO-US000666.  
XX 30-JAN-2001; 2001WO-US000667.  
XX 30-JAN-2001; 2001WO-US000668.  
XX 30-JAN-2001; 2001WO-US000669.  
XX 05-FEB-2001; 2001US-0266860P.  
XX (AEOM-) AEOMICA INC.  
PA Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;  
XX WPI; 2002-179446/23.  
XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,  
XX or as specific biomolecule capture probes for surface-enhanced laser  
XX desorption ionization, comprises human myosin-like protein hGDMPLP-1.  
XX Disclosure; SEQ ID NO 974; 214pp; English.  
XX The present invention describes a human genome-derived myosin-like  
XX protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-  
XX 1 can be used in gene therapy and vaccine production. The hGDMPLP-1  
XX nucleic acids can be used as probes to detect, characterise and quantify  
XX hGDMPLP-1 nucleic acids in samples, as amplification substrates, to  
XX provide initial substrates for the recombinant engineering of hGDMPLP-1  
XX protein variants having desired phenotypic improvements, and for  
XX expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be  
XX used as immunogens to raise antibodies that specifically recognise hGDMPLP  
XX -1 proteins, as standards in assays used to determine the concentration  
XX and/or amount specifically of hGDMPLP proteins, as specific biomolecule  
XX capture probes for surface-enhanced laser desorption/ionisation, as  
XX therapeutic supplement in patients having specific deficiency in hGDMPLP-1  
XX production, and in vaccines or for replacement therapy. The  
XX polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a  
XX disorder associated with the expression of hGDMPLP-1, in particular heart  
XX and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.  
XX The present sequence represents an oligomer used in the screening of the  
XX hGDMPLP-1 sequence in the exemplification of the present invention. N.B.  
XX The sequence data for this patent did not form part of the printed  
XX specification, but was obtained in electronic format directly from WIPO  
XX at ftp.wipo.int/pub/published\_pct\_sequence  
XX  
XX Sequence 17 BP; 4 A; 7 C; 6 G; 0 T; 0 U; 0 Other;  
Query Match 0.6%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 2.9e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 1056 GGCCCAAGCCCAAG 1070  
DB 1 GGCCCAAGCCCAAG 15  
RESULT 312  
ABK18858/c  
ID ABK18858 standard; RNA; 17 BP.  
XX ABK18858;  
XX 09-APR-2002 (first entry)  
DT

Human ERG DNAzyme target sequence Seq ID No 1505.  
Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;  
ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;  
vulnary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;  
tumour angiogenesis; diabetic retinopathy; macular degeneration;  
neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;  
angiofibroma of tuberous sclerosis; port-wine stain; wound healing;  
Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;  
Osler-Weber-rendu syndrome; leukaemia; osteoporosis; DNAzyme; inozyme;  
amberzyme.  
Homo sapiens.  
WO200168124-A2.  
22-NOV-2001.  
16-MAY-2001; 2001WO-US015866.  
16-MAY-2000; 2000US-00572021.  
(RIBO-) RIBOZYME PHARM INC.  
(GLAX) GLAXO GROUP LTD.  
Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;  
WPI; 2002-0822995/11.  
Novel polynucleotide which down regulates expression of Ets-related gene,  
useful for treating cancer, diabetic retinopathy, macular degeneration,  
arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.  
Claim 4; Page 93; 149pp; English.  
The invention relates to a nucleic acid molecule (I) which down regulates  
expression of an Ets-related gene (ERG). (I) is useful for treating  
conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,  
tumour angiogenesis, diabetic retinopathy, macular degeneration,  
neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca  
vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge  
Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu  
syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for  
treating a patient having a condition associated with the level of ERG,  
by contacting cells of the patient with (I) under conditions suitable for  
the treatment. The method comprises the use of one or more therapies  
under conditions suitable for the treatment. Leukaemia or tumour  
angiogenesis is treated by administering (I) to the patient in  
conjunction with one or more of other therapies such as radiation or  
chemotherapy treatment. (I) is useful for reducing ERG activity in a  
cell, by contacting the cell with (I). (I) is useful for cleaving RNA of  
ERG gene, by contacting (I) with RNA, in the presence of a divalent  
cation such as Mg2+. (I) is useful for diagnosis of conditions and  
diseases related to the expression of ERG, and as diagnostic tool to  
examine genetic drift and mutations within diseased cells or to detect  
the presence of ERG RNA in a cell. (I) is useful for specifically  
targeting genes that share homology with ERG gene or ERG fusion genes.  
ABK17354-ABK22719 represent nucleic acids, including antisense and  
enzymatic nucleic acid molecules which regulate expression of ERG, and  
related PCR primers of the invention  
XX  
XX Sequence 17 BP; 3 A; 4 C; 5 G; 0 T; 5 U; 0 Other;  
Query Match 0.6%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 2.9e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 752 GCACCTGCCATGCAG 766  
DB 16 GCACATGCCATGCAG 2

```
RESULT 313
ABT34708/C
ID ID ABT34708 standard; DNA; 17 BP.
XX AC
XX AC ABT34708;
XX DT
XX DT 12-JUN-2003 (first entry)
XX DE
XX DE Tumour suppression related human fukutin oligo SEQ ID No 345.
XX KW
XX KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
XX KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
XX KW schizophrenia; protein chip; gene therapy; tumour suppression;
XX KW human fukutin; ds.
XX OS
XX OS Homo sapiens.
XX PN
XX PN WO2003025175-A2.
XX PD
XX PD 27-MAR-2003.
XX PF
XX PF 17-SEP-2002; 2002WO-IB004208.
XX PR
XX PR 17-SEP-2001; 2001FR-00011978.
XX PA
XX PA (MOLE-) MOLECULAR ENGINES LAB.
XX PI
XX PI Telerman A, Amson R, Tuijnder M;
XX PI WPI; 2003-313353/30.
XX DR
XX DR New isolated nucleic acid, useful for treating viral diseases associated
XX PT with tumors and cell degeneration, also related polypeptides, antibodies
XX PT and transfected cells.
XX PS
XX PS Disclosure; Page 74; 720pp; French.
XX CC
XX CC The invention relates to a novel isolated 17 mer nucleic acid sequence,
XX CC given in the specification, a sequence containing at least 15 consecutive
XX CC nucleotides from the 17 mer sequence, a sequence with, after optimal
XX CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that
XX CC hybridizes to them under highly stringent conditions, or the complement
XX CC of any of them, or the corresponding RNA. The novel isolated nucleic
XX CC acids of the invention are useful as probes and primers for detecting,
XX CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
XX CC component of a gene chip, in vitro as (anti)sense reagents, and for
XX CC production of recombinant polypeptides. Any of the nucleic acids,
XX CC polypeptides, vectors containing the nucleic acids, cells containing the
XX CC vector or antibodies directed against the polypeptides are useful for
XX CC preparation of pharmaceuticals for prevention and/or treatment of viral
XX CC diseases that are characterised by development of tumours or cell
XX CC degeneration, specifically cancer but also Alzheimer's disease and
XX CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
XX CC patient samples is useful for diagnosis and/or prognosis of these
XX CC diseases. The polypeptides can also be used to generate antibodies, and
XX CC both the polypeptide and antibodies are useful as components of protein
XX CC chips. The nucleic acid sequences of the invention can be used in gene
XX CC therapy. This polynucleotide sequence represents a tumour suppression
XX CC related human fukutin oligonucleotide of the invention
XX SQ
XX SQ Sequence 17 BP; 4 A; 4 C; 4 G; 5 T; 0 U; 0 Other;
XX
Query Match 0.6%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 2.9e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 970 TGGAGTCCAGATC 984
DB 15 TGGAGTCCAGATC 1
RESULT 314
ABT39967/C
ID ID ABT39967 standard; DNA; 17 BP.
XX AC
XX AC ABT39967;
XX DT
XX DT 13-JUN-2003 (first entry)
XX DE
XX DE Tumour suppression related human fukutin oligo SEQ ID No 5604.
XX KW
XX KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
XX KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
XX KW schizophrenia; protein chip; gene therapy; tumour suppression;
XX KW human fukutin; ds.
XX OS
XX OS Homo sapiens.
XX PN
XX PN WO2003025175-A2.
XX PD
XX PD 27-MAR-2003.
XX PF
XX PF 17-SEP-2002; 2002WO-IB004208.
XX PR
XX PR 17-SEP-2001; 2001FR-00011978.
XX PA
XX PA (MOLE-) MOLECULAR ENGINES LAB.
XX PI
XX PI Telerman A, Amson R, Tuijnder M;
XX PI WPI; 2003-313353/30.
XX DR
XX DR New isolated nucleic acid, useful for treating viral diseases associated
XX PT with tumors and cell degeneration, also related polypeptides, antibodies
XX PT and transfected cells.
XX PS
XX PS Disclosure; Page 689; 720pp; French.
XX CC
XX CC The invention relates to a novel isolated 17 mer nucleic acid sequence,
XX CC given in the specification, a sequence containing at least 15 consecutive
XX CC nucleotides from the 17 mer sequence, a sequence with, after optimal
XX CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that
XX CC hybridizes to them under highly stringent conditions, or the complement
XX CC of any of them, or the corresponding RNA. The novel isolated nucleic
XX CC acids of the invention are useful as probes and primers for detecting,
XX CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
XX CC component of a gene chip, in vitro as (anti)sense reagents, and for
XX CC production of recombinant polypeptides. Any of the nucleic acids,
XX CC polypeptides, vectors containing the nucleic acids, cells containing the
XX CC vector or antibodies directed against the polypeptides are useful for
XX CC preparation of pharmaceuticals for prevention and/or treatment of viral
XX CC diseases that are characterised by development of tumours or cell
XX CC degeneration, specifically cancer but also Alzheimer's disease and
XX CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
XX CC patient samples is useful for diagnosis and/or prognosis of these
XX CC diseases. The polypeptides can also be used to generate antibodies, and
XX CC both the polypeptide and antibodies are useful as components of protein
XX CC chips. The nucleic acid sequences of the invention can be used in gene
XX CC therapy. This polynucleotide sequence represents a tumour suppression
XX CC related human fukutin oligonucleotide of the invention
XX SQ
XX SQ Sequence 17 BP; 3 A; 3 C; 7 G; 4 T; 0 U; 0 Other;
XX
Query Match 0.6%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 2.9e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 882 CACCACAGTGTGT 896
DB 16 CACCACAGTGTGTAT 2
RESULT 315
ABT37525/C
ID ID ABT37525 standard; DNA; 17 BP.
XX AC
XX AC ABT37525 standard; DNA; 17 BP.
```

AC ABT37525;  
 XX DT 12-JUN-2003 (first entry)  
 XX DE  
 XX KW Tumour suppression related human fukutin oligo SEQ ID No 3162.  
 DE  
 KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;  
 KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;  
 KW schizophrenia; protein chip; gene therapy; tumour suppression;  
 KW human fukutin; ds.  
 XX KW Homo sapiens.  
 OS  
 XX WO2003025175-A2.  
 PN  
 XX 27-MAR-2003.  
 XX PD  
 XX PF 17-SEP-2002; 2002WO-IB004208.  
 XX PR 17-SEP-2001; 2001FR-00011978.  
 XX PA (MOLE-) MOLECULAR ENGINES LAB.  
 XX PI Telerman A, Amson R, Tuijnder M;  
 XX WPI; 2003-313353/30.  
 DR  
 XX New isolated nucleic acid, useful for treating viral diseases associated  
 XX with tumors and cell degeneration, also related polypeptides, antibodies  
 XX and transfected cells.  
 XX PS Disclosure; Page 403; 720pp; French.  
 XX  
 CC The invention relates to a novel isolated 17 mer nucleic acid sequence,  
 CC given in the specification, a sequence containing at least 15 consecutive  
 CC nucleotides from the 17 mer sequence, a sequence with, after optimal  
 CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that  
 CC hybridizes to them under highly stringent conditions, or the complement  
 CC of any of them, or the corresponding RNA. The novel isolated nucleic  
 CC acids of the invention are useful as probes and primers for detecting,  
 CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one  
 CC component of a gene chip, in vitro as (anti)sense reagents, and for  
 CC production of recombinant polypeptides. Any of the nucleic acids,  
 CC polypeptides, vectors containing the nucleic acids, cells containing the  
 CC vector or antibodies directed against the polypeptides are useful for  
 CC preparation of pharmaceuticals for prevention and/or treatment of viral  
 CC diseases that are characterised by development of tumours or cell  
 CC degeneration, specifically cancer but also Alzheimer's disease and  
 CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in  
 CC patient samples is useful for diagnosis and/or prognosis of these  
 CC diseases. The polypeptides can also be used to generate antibodies, and  
 CC both the polypeptide and antibodies are useful as components of protein  
 CC chips. The nucleic acid sequences of the invention can be used in gene  
 CC therapy. This polynucleotide sequence represents a tumour suppression  
 CC related human fukutin oligonucleotide of the invention  
 XX  
 SQ Sequence 17 BP; 4 A; 3 C; 6 G; 4 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 93.3%; Pred. No. 2.9e+02;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 882 CACCACAGGCGTGT 896  
 |||||  
 DB 16 CACCACAGTGTGAT 2  
 RESULT 316  
 ACDS3467  
 ID ACDS3467 standard; RNA; 17 BP.  
 XX  
 AC ACDS3467;  
 XX

DT 24-SEP-2003 (first entry)  
 XX HBV G-cleaver substrate sequence #155.  
 DE  
 XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;  
 KW RNA stability; RNA expression; RNA synthesis; antisense;  
 KW enzymatic nucleic acid; hammerhead ribozyme; DNzyme; zinzyme;  
 KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;  
 KW HBV reverse transcriptase; Enhancer I region; viral replication;  
 KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;  
 KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;  
 KW virucide; antiinflammatory; substrate; ss.  
 XX  
 OS Hepatitis B virus.  
 XX  
 XX WO200281494-A1.  
 EN  
 XX 17-OCT-2002.  
 XX PD  
 XX PF 26-MAR-2002; 2002WO-US009187.  
 XX PR 26-MAR-2001; 2001US-00817879.  
 XX PR 08-JUN-2001; 2001US-00817879.  
 XX PR 08-JUN-2001; 2001US-0296876P.  
 XX PR 24-OCT-2001; 2001US-0335059P.  
 XX PR 05-DEC-2001; 2001US-0337055P.  
 XX  
 XX (RIBO-) RIBOZYME PHARM INC.  
 XX (BLAT/) BLATT L.  
 XX (MACE/) MACEJAK D.  
 XX (MCSW/) MCSWISSEN J.  
 XX (MORR/) MORRISSEY D.  
 XX (PAVC/) PAVCO P.  
 XX (LEEP/) LEE P.  
 XX (DRAP/) DRAPER K.  
 XX (ROBE/) ROBERTS E.  
 XX  
 XX Blatt L, Macejak D, Mcswiggen J, Morrissey J, Pavco P, Lee P;  
 PI Draper K, Roberts E;  
 XX WPI; 2003-229207/22.  
 XX  
 PT Novel compound useful for treating cirrhosis, liver failure,  
 PT hepatocellular carcinoma, or condition associated with hepatitis C virus  
 PT infection.  
 XX  
 PS Example 1; Page 168; 387pp; English.  
 XX  
 CC The present invention relates to nucleic acid molecules which modulate  
 CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or  
 CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense  
 CC and enzymatic nucleic acids such as hammerhead ribozymes, DNzymes,  
 CC indzymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed  
 CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse  
 CC transcriptase and/or HBV reverse transcriptase primer sequences, as well  
 CC as oligonucleotides that specifically bind the Enhancer I region of HBV  
 CC DNA. The nucleic acids may be used to modulate the expression of HBV  
 CC genes and HBV viral replication. Also disclosed is a method for screening  
 CC compounds and/or potential therapies directed against HBV, and compounds  
 CC that modulate the expression and/or replication of HCV. The compounds and  
 CC methods of the invention are useful for the treatment of degenerative and  
 CC disease states related to HBV and HCV infection, replication and gene  
 CC expression such as cirrhosis, liver failure, and hepatocellular  
 CC carcinoma. The present sequence represents a substrate for one of the HBV  
 CC ribozyme, inozyme, G-cleaver, zinzyme, DNzyme or amberzyme sequences  
 CC disclosed in the present invention  
 XX  
 SQ Sequence 17 BP; 0 A; 2 C; 4 G; 0 T; 11 U; 0 Other;  
 Query Match 0.6%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 26.7%; Pred. No. 2.9e+02;  
 Matches 4; Conservative 10; Mismatches 1; Indels 0; Gaps 0;  
 XX



QY 909 TTCTCTTGGTCTTG 923  
 Db 1 UUUUUUUUGUCUUG 15

RESULT 317  
 ACD52078  
 ID ACD52078 standard; RNA; 17 BP.  
 XX AC  
 XX ACD52078;  
 DT 24-SEP-2003 (first entry)  
 XX DE  
 XX HBV inozyme substrate sequence #208.

XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;  
 KW RNA stability; RNA expression; RNA synthesis; antisense;  
 KW enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;  
 KW aptamer; G-cleaver ribozyme; decoy molecule; aptamer;  
 KW HBV reverse transcriptase; Enhancer I region; viral replication;  
 KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;  
 KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;  
 KW virucide; antiinflammatory; substrate; ss.  
 XX OS  
 XX Hepatitis B virus.  
 XX WO200281494-A1.  
 XX 17-OCT-2002.  
 XX 26-MAR-2002; 2002WO-US009187.  
 XX 26-MAR-2001; 2001US-00817879.  
 XX 08-JUN-2001; 2001US-00877478.  
 XX 08-JUN-2001; 2001US-0296876P.  
 XX 24-OCT-2001; 2001US-0335059P.  
 XX 05-DEC-2001; 2001US-0337055P.  
 XX (RIBO-) RIBOZYME PHARM INC.  
 PA (BLAT/) BLATT L.  
 PA (MACE/) MACEJAK D.  
 PA (MCSW/) MCSWIGGEN J.  
 PA (MORR/) MORRISSEY D.  
 PA (PAVC/) PAVCO P.  
 PA (LEEP/) LEE P.  
 PA (DRAP/) DRAPER K.  
 PA (ROBE/) ROBERTS E.  
 XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;  
 PI Draper K, Roberts E;  
 XX WPI; 2003-229207/22.  
 DR Novel compound useful for treating cirrhosis, liver failure,  
 XX hepatocellular carcinoma, or condition associated with hepatitis C virus  
 XX infection.  
 XX Example 1; Page 154; 387pp; English.

XX The present invention relates to nucleic acid molecules which modulate  
 CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or  
 CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense  
 CC and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes,  
 CC inozymes, zinzymes, aptamers, and G-cleaver ribozymes. Also disclosed  
 CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse  
 CC transcriptase and/or HBV reverse transcriptase primer sequences, as well  
 CC as oligonucleotides that specifically bind the Enhancer I region of HBV  
 CC DNA. The nucleic acids may be used to modulate the expression of HBV  
 CC genes and HBV viral replication. Also disclosed is a method for screening  
 CC compounds and/or potential therapies directed against HBV, and compounds  
 CC that modulate the expression and/or replication of HCV. The compounds and  
 CC methods of the invention are useful for the treatment of degenerative and  
 CC disease states related to HBV and HCV infection, replication and gene

CC expression such as cirrhosis, liver failure, and hepatocellular  
 CC carcinoma. The present sequence represents a substrate for one of the HBV  
 CC ribozyme, inozyme, G-cleaver, zinzyme, DNAzyme or aptamer sequences  
 CC disclosed in the present invention  
 XX  
 XX Sequence 17 BP; 2 A; 3 C; 1 G; 0 T; 11 U; 0 Other;  
 Query Match 0.6%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 26.7%; Pred. No. 2.9e+02;  
 Matches 4; Conservative 10; Mismatches 1; Indels 0; Gaps 0;  
 QY 907 ATTTCTTGGTCTT 921  
 Db 3 AUUUUUUUUGUCU 17

RESULT 318  
 ADB45859/c  
 ID ADB45859 standard; DNA; 17 BP.  
 XX AC ADB45859;  
 XX DT  
 XX 18-DEC-2003 (first entry)  
 XX DE  
 XX Tumour suppression/reversion associated nucleotide #6182.  
 XX cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;  
 KW primer; probe; tumour suppression; tumour reversion; apoptosis;  
 KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;  
 KW diagnosis.  
 XX OS  
 XX Homo sapiens.  
 XX WO2003040369-A2.  
 XX 15-MAY-2003.  
 XX 17-SEP-2002; 2002WO-IB004219.  
 XX 17-SEP-2001; 2001FR-00011981.  
 XX (MOLE-) MOLECULAR ENGINES LAB.  
 XX Telerman A, Amson R, Tuijnder M;  
 XX WPI; 2003-441574/41.  
 XX New nucleic acid encoding human prostate membrane-specific antigen,  
 XX useful e.g. for treatment of tumors and viral infection, also related  
 XX polypeptide and antibodies.  
 XX Disclosure; Page 754; 771pp; French.

XX The invention relates to the isolation of 5327 nucleotide sequences,  
 CC fragments of at least 15 consecutive nucleotides of these nucleotides, a  
 CC sequence having at least 80% identity, after optimal alignment, with the  
 CC nucleotides, a sequence that hybridizes under stringent conditions with  
 CC the nucleotides, or the complement, or corresponding RNA, of the  
 CC nucleotides. The nucleotides are used as probes or primers for detecting,  
 CC identifying, quantifying and/or amplifying nucleic acids, as in vitro  
 CC sense and antisense sequences, of nucleotides involved in tumour  
 CC suppression or reversion, apoptosis and or viral resistance, to produce  
 CC recombinant polypeptides, and to prepare transgenic animals, as  
 CC experimental models. The nucleotides (also vectors containing them and  
 CC cells containing the vectors), the encoded polypeptides and antibodies  
 CC (Ab) against the polypeptide are useful for prevention and/or treatment  
 CC of viral infections or diseases characterized by development of tumours  
 CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).  
 CC Analysis of the expression of the nucleotides can be used for diagnosis  
 CC and/or prognosis of these diseases. The nucleotides and polypeptides can  
 CC also be used to screen for their specific interactive molecules.  
 CC potentially useful for treating diseases associated with abnormal  
 CC expression of the nucleotides.

XX SQ Sequence 17 BP; 3 A; 3 C; 7 G; 4 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 93.3%; Pred. No. 2.9e+02;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 882 CACCACAGTGTCTT 896  
 DB 16 CACCACAGTGTCTGAT 2

RESULT 319  
 ADB45835/C  
 ID ADB45835 standard; DNA; 17 BP.  
 XX AC ADB45835;  
 XX DT 18-DEC-2003 (first entry)  
 XX DE Tumour suppression/reversion associated nucleotide #6158.  
 XX KW cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;  
 KW primer; probe; tumour suppression; tumour reversion; apoptosis;  
 KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;  
 KW diagnosis.  
 XX OS Homo sapiens.  
 XX PN WO2003040369-A2.  
 XX PD 15-MAY-2003.  
 XX PF 17-SEP-2002; 2002WO-IB004219.  
 XX PR 17-SEP-2001; 2001FR-00011981.  
 XX PA (MOLE-) MOLECULAR ENGINES LAB.  
 XX PI Telerman A, Amson R, Tuijnder M;  
 XX WPI; 2003-441574/41.  
 XX DR New nucleic acid encoding human prostate membrane-specific antigen,  
 XX PT useful e.g. for treatment of tumors and viral infection, also related  
 XX PT polypeptide and antibodies.  
 XX PS Disclosure; Page 751; 771pp; French.  
 XX CC The invention relates to the isolation of 6327 nucleotide sequences,  
 CC fragments of at least 15 consecutive nucleotides of these nucleotides, a  
 CC sequence having at least 80% identity, after optimal alignment, with the  
 CC nucleotides, a sequence that hybridizes under stringent conditions with  
 CC the nucleotides, or the complement, or corresponding RNA, of the  
 CC nucleotides. The nucleotides are used as probes or primers for detecting,  
 CC identifying, quantifying and/or amplifying nucleic acids, as in vitro  
 CC sense and antisense sequences, of nucleotides involved in tumour  
 CC suppression or reversion, apoptosis and or viral resistance, to produce  
 CC recombinant polypeptides, and to prepare transgenic animals, as  
 CC experimental models. The nucleotides (also vectors containing them and  
 CC cells containing the vectors), the encoded polypeptides and antibodies  
 CC (Ab) against the polypeptide are useful for prevention and/or treatment  
 CC of viral infections or diseases characterized by development of tumours  
 CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).  
 CC Analysis of the expression of the nucleotides can be used for diagnosis  
 CC and/or prognosis of these diseases. The nucleotides and polypeptides can  
 CC also be used to screen for their specific interactive molecules,  
 CC potentially useful for treating diseases associated with abnormal  
 CC expression of the nucleotides.

XX SQ Sequence 17 BP; 3 A; 5 C; 3 G; 6 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 93.3%; Pred. No. 2.9e+02;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 861 TAAGGGCACTGAGGA 875  
 DB 17 TAAGGCACTGAGGA 3

RESULT 320  
 ACD53740  
 ID ACD53740 standard; RNA; 17 BP.  
 XX AC ACD53740;  
 XX DT 24-SEP-2003 (first entry)  
 XX DE HBV zinzyme substrate sequence #12.  
 XX KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;  
 KW RNA stability; RNA expression; RNA synthesis; antisense;  
 KW enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;  
 KW amberyne; G-cleaver ribozyme; decoy molecule; aptamer;  
 KW HBV reverse transcriptase; Enhancer I region; viral replication;  
 KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;  
 KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;  
 KW virucide; antiinflammatory; substrate; ss.  
 XX OS Hepatitis B virus.  
 XX PN WO200281494-A1.  
 XX PD 17-OCT-2002.  
 XX PF 26-MAR-2002; 2002WO-US009187.  
 XX PR 26-MAR-2001; 2001US-00817879.  
 XX PR 08-JUN-2001; 2001US-00877478.  
 XX PR 08-JUN-2001; 2001US-0296876P.  
 XX PR 24-OCT-2001; 2001US-0335059P.  
 XX PR 05-DEC-2001; 2001US-0337055P.  
 XX PA (RIBO-) RIBOZYME PHARM INC.  
 XX PA (BLAT/) BLATT L.  
 XX PA (MACE/) MACEJAK D.  
 XX PA (MCSW/) MCSWIGGEN J.  
 XX PA (MORR/) MORRISSEY D.  
 XX PA (PAVC/) PAVCO P.  
 XX PA (LEBP/) LEE P.  
 XX PA (DRAP/) DRAPER K.  
 XX PA (ROBE/) ROBERTS E.  
 XX PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;  
 XX Draper K, Roberts E;  
 XX WPI; 2003-229207/22.  
 XX PT Novel compound useful for treating cirrhosis, liver failure,  
 XX PT hepatocellular carcinoma, or condition associated with hepatitis C virus  
 XX PT infection.  
 XX PS Example 1; Page 173; 387pp; English.  
 XX CC The present invention relates to nucleic acid molecules which modulate  
 CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or  
 CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense  
 CC and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes,  
 CC inozymes, zinzymes, amberyne, and G-cleaver ribozymes. Also disclosed  
 CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse  
 CC transcriptase and/or HBV reverse transcriptase primer sequences, as well  
 CC as oligonucleotides that specifically bind the Enhancer I region of HBV  
 CC DNA. The nucleic acids may be used to modulate the expression of HBV  
 CC genes and HBV viral replication. Also disclosed is a method for screening  
 CC compounds and/or potential therapies directed against HBV, and compounds

CC that modulate the expression and/or replication of HCV. The compounds and  
 CC methods of the invention are useful for the treatment of degenerative and  
 CC disease states related to HBV and HCV infection, replication and gene  
 CC expression such as cirrhosis, liver failure, and hepatocellular  
 CC carcinoma. The present sequence represents a substrate for one of the HBV  
 CC ribozyme, inozyme, G-cleaver, zinzyme, DNazyme or amberzyme sequences  
 CC disclosed in the present invention.

XX  
 SQ Sequence 17 BP; 6 A; 5 C; 3 G; 0 T; 3 U; 0 Other;  
 Query Match 0.6%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 86.7%; Pred. No. 2.9e+02;  
 Matches 13; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1297 CCACAGAGCCTAGAC 1311  
 Db 2 CCACAGAGUCUAGAC 16  
 |||||:||||  
 |||||:||||

RESULT 321  
 AAV14107/C  
 ID AAV14107 standard; DNA; 18 BP.  
 XX AC AAV14107;  
 XX AC  
 XX DT 27-AUG-2003 (revised)  
 XX DT 19-MAY-1998 (first entry)  
 XX DE Probe HBPr273 for RT pol region of HBV.  
 XX KW Probe; hepatitis b virus; HBV detection; RT pol region; genetic analysis;  
 XX KW preCore region; HBsAg region; genotype specific target;  
 XX KW mutation detection; ss.  
 XX OS Synthetic.  
 XX OS Hepatitis B virus.  
 XX PN WO9740193-A2.  
 XX PD 30-OCT-1997.  
 XX PF 21-APR-1997; 97WO-EP002002.  
 XX PR 19-APR-1996; 96EP-00870053.  
 XX PA (INNO-) INNOGENETICS NV.  
 XX PI Stuyver L, Rossau R, Maertens G;  
 XX DR WPI; 1997-535867/49.  
 XX PS Claim 5; Fig 1; 80pp; English.

CC This sequence represents a probe for the RT pol region of hepatitis b  
 CC virus (HBV). This sequence can be used in the method of the invention for  
 CC detection and/or genetic analysis of hepatitis B virus (HBV) in a sample.  
 CC The method comprises: (a) optionally releasing, isolating or  
 CC concentrating polynucleic acids (I) in the sample, and amplifying the  
 CC relevant part of a suitable HBV gene in the sample with at least 1  
 CC suitable primer pair; (b) hybridising (I) with a combination of at least  
 CC 2 nucleotide probes, which are applied to known locations on a solid  
 CC support and hybridise specifically to mutant target sequences chosen from  
 CC the HBV RT pol gene region, HBV preCore region, HBsAg region and/or HBV  
 CC genotype specific target sequences, or their complements or U for T  
 CC homologues; (c) detecting the hybrids formed in step (b), and inferring  
 CC the HBV genotype and/or mutants present in the sample from the  
 CC differential hybridisation signal(s). The composition can be used to  
 CC diagnose and/or monitor HBV mutants and/or genotypes in a sample,  
 CC specifically genotype, preCore mutations, vaccine escape mutations and RT  
 CC mutations selected by treatment with drugs.

CC gene mutations selected by treatment with drugs, e.g. lamivudine and  
 CC penciclovir. (Updated on 27-AUG-2003 to correct OS field.)

XX  
 SQ Sequence 18 BP; 1 A; 7 C; 4 G; 6 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 13.4; DB 1; Length 18;  
 Best Local Similarity 93.3%; Pred. No. 3.5e+02;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 728 GCCAGGAGAAACAGA 742  
 Db 18 GCCAGGAGAAACGGA 4  
 |||||:|||||  
 |||||:|||||

RESULT 322  
 AAV14104/C  
 ID AAV14104 standard; DNA; 18 BP.  
 XX AC AAV14104;  
 XX AC  
 XX DT 27-AUG-2003 (revised)  
 XX DT 19-MAY-1998 (first entry)  
 XX DE Probe HBPr270 for RT pol region of HBV.  
 XX KW Probe; hepatitis b virus; HBV detection; RT pol region; genetic analysis;  
 XX KW preCore region; HBsAg region; genotype specific target;  
 XX KW mutation detection; ss.  
 XX OS Synthetic.  
 XX OS Hepatitis B virus.  
 XX PN WO9740193-A2.  
 XX PD 30-OCT-1997.  
 XX PF 21-APR-1997; 97WO-EP002002.  
 XX PR 19-APR-1996; 96EP-00870053.  
 XX PA (INNO-) INNOGENETICS NV.  
 XX PI Stuyver L, Rossau R, Maertens G;  
 XX DR WPI; 1997-535867/49.  
 XX PS Claim 5; Fig 1; 80pp; English.

CC This sequence represents a probe for the RT pol region of hepatitis b  
 CC virus (HBV). This sequence can be used in the method of the invention for  
 CC detection and/or genetic analysis of hepatitis B virus (HBV) in a sample.  
 CC The method comprises: (a) optionally releasing, isolating or  
 CC concentrating polynucleic acids (I) in the sample, and amplifying the  
 CC relevant part of a suitable HBV gene in the sample with at least 1  
 CC suitable primer pair; (b) hybridising (I) with a combination of at least  
 CC 2 nucleotide probes, which are applied to known locations on a solid  
 CC support and hybridise specifically to mutant target sequences chosen from  
 CC the HBV RT pol gene region, HBV preCore region, HBsAg region and/or HBV  
 CC genotype specific target sequences, or their complements or U for T  
 CC homologues; (c) detecting the hybrids formed in step (b), and inferring  
 CC the HBV genotype and/or mutants present in the sample from the  
 CC differential hybridisation signal(s). The composition can be used to  
 CC diagnose and/or monitor HBV mutants and/or genotypes in a sample,  
 CC specifically genotype, preCore mutations, vaccine escape mutations and RT  
 CC gene mutations selected by treatment with drugs, e.g. lamivudine and  
 CC penciclovir. (Updated on 27-AUG-2003 to correct OS field.)

XX  
 SQ Sequence 18 BP; 1 A; 5 C; 4 G; 8 T; 0 U; 0 Other;



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PN US958772-A.
XX
XX
PD 28-SEP-1999.
XX
XX 03-DEC-1998; 98US-00205204.
XX
XX 03-DEC-1998; 98US-00205204.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Bennett CF, Cowsett LM, Ackermann EJ;
XX
XX WPI; 1999-561047/47.
XX
XX Antisense compounds complementary to Cellular Inhibitor of Apoptosis-1
PT useful for e.g. diagnostics, therapeutics, and as research reagents.
XX
XX Claim 3; Col 38; 32pp; English.
XX
XX The invention provides antisense compounds of 8-30 nucleotides that
CC inhibit the expression of human Cellular Inhibitor of Apoptosis-1 (c-IAP-
CC 1). The antisense compounds may be used for diagnostics, therapeutics
CC (for modulating the expression of c-IAP-1), prophylaxis (e.g. to prevent
CC or delay infection, inflammation, or tumor formation), as research
CC reagents (e.g. to distinguish between members of a biological pathway)
CC and in kits. Sequences AA22150-189 represent phosphorothioate
CC oligonucleotides used for antisense inhibition of cellular inhibitor of
CC apoptosis-1
XX
XX Sequence 18 BP; 3 A; 4 C; 3 G; 8 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 13.4; DB 1; Length 18;
Best Local Similarity 93.3%; Pred. No. 3.5e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 761 ATGCAGGTTCTTTC 775
DB 4 ATGCAGGTTCTTTC 18
RESULT 326
AAZ70729
ID AAZ70729 standard; DNA; 18 BP.
XX
XX AAZ70729;
AC
XX
XX 10-SEP-2001 (first entry)
DT
XX
XX Human biallelic marker upstream amplification primer SEQ ID NO:5085.
DE
XX
XX Human genome; biallelic marker; high density disequilibrium map;
KW genomic map; haplotype; phenotype; polymorphic base; genotyping;
KW haplotyping; hybridisation; identification; characterisation;
KW amplification; single nucleotide polymorphism; SNP; PCR primer;
KW diagnosis; ss.
XX
XX Homo sapiens.
OS
XX
XX WO9954500-A2.
PN
XX
XX 28-OCT-1999.
PD
XX
XX 21-APR-1999; 99WO-1B000822.
XX
XX 21-APR-1998; 98US-0082614P.
PR
XX 23-NOV-1998; 98US-0109732P.
PR
XX
XX (GEST ) GENSET.
PA
XX
XX Cohen D, Blumenfeld M, Chumakov I;
PI
XX
XX WPI; 2000-013267/01.
DR
XX

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PT Novel biallelic markers used to construct a high density disequilibrium
PT map of the human genome.
XX
XX Claim 8; Page 1315; 2745pp; English.
XX
XX AAZ65654 to AAZ69578 represent human biallelic markers from the present
XX invention, which contain a polymorphic base at position 24 of their
CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
CC primers for the biallelic markers. The biallelic markers of the invention
CC have a variety of uses: they can be used for high density mapping of the
CC human genome, and in complex association studies and haplotyping studies
CC which are useful in determining the genetic basis for disease states.
CC Compositions and methods of the invention can also be useful for the
CC identification of the targets for the development of pharmaceutical
CC agents and diagnostic methods, as well as the characterisation of the
CC differential efficacious responses to and side effects from
CC pharmaceutical agents acting on a disease as well as other treatment.
CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
CC 3367, are not actually given a sequence in the Sequence Listing from the
CC present invention
XX
XX Sequence 18 BP; 4 A; 8 C; 0 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 13.4; DB 1; Length 18;
Best Local Similarity 93.3%; Pred. No. 3.5e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 976 TCCAGGCTCTACTCC 990
DB 4 TCCAAACTCTACTCC 18
RESULT 327
ABZ75036/C
ID ABZ75036 standard; DNA; 18 BP.
XX
XX ABZ75036;
AC
XX
XX 10-MAY-2003 (first entry)
DT
XX
XX Mus musculus/Mus spretus STK15 reverse PCR primer, SEQ ID NO:32.
DE
XX
XX Serine/threonine kinase 15; STK15; STK6; Aurora2; cell cycle;
KW centrosome-associated kinase; cancer susceptibility;
KW single nucleotide polymorphism; SNP; genetic diagnosis; prognosis;
KW detection; diagnosis; cancer; malignant astrocytoma; glioblastoma;
KW medulloblastoma; gastric cancer; colorectal cancer; colorectal adenoma;
KW acute myelogenous leukaemia; lung cancer; renal cancer; leukaemia; mouse;
KW breast cancer; prostate cancer; endometrial cancer; neuroblastoma; mouse;
KW murine; PCR; primer; ss.
XX
XX Mus musculus.
OS
XX Mus spretus.
XX
XX WO2003012046-A2.
PN
XX
XX 13-FEB-2003.
PD
XX
XX 29-JUL-2002; 2002WO-US024115.
PF
XX
XX 27-JUL-2001; 2001US-0308911P.
PR
XX 28-NOV-2001; 2001US-0334146P.
PR
XX
XX (REGC ) UNIV CALIFORNIA.
PA
XX
XX Toland AE, Balmain A;
PI
XX
XX WPI; 2003-239517/23.
DR
XX
XX Determining cancer susceptibility in a human subject comprises
PT identifying in a nucleic acid sample from the subject, a nucleotide
PT occurrence of a single polynucleotide polymorphism (SNP) of the STK15
PT gene.

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XX PS Example 2; Page 57; 92pp; English.
XX CC
XX CC The invention relates to a method for determining cancer susceptibility
XX CC in a human patient. The method involves determining the identity of the
XX CC nucleotide at position 457 of the serine/threonine kinase 15 (STK15) DNA
XX CC (ABZ75905). This site is a T/A single nucleotide polymorphism (SNP) in
XX CC the coding region of the DNA, resulting in either a Phe or Ile residue at
XX CC position 31 in the corresponding STK15 protein (ABP97366). The A457
XX CC (Ile31) allele (see ABZ75006, ABP97367) is associated with an increased
XX CC cancer susceptibility. STK15 (also known as STK6 and Aurora2) is a
XX CC centrosome-associated kinase that is highly expressed at the G2 and M
XX CC phase of the cell cycle, and its gene is located on chromosome 20. The
XX CC method of the invention are useful for determining cancer susceptibility
XX CC and for prognosing, detecting and/or diagnosing cancers such as malignant
XX CC astrocytoma, glioblastoma, medulloblastoma, gastric cancer, colorectal
XX CC cancer, colorectal adenoma, acute myelogenous leukemia, lung cancer,
XX CC renal cancer, leukaemia, breast cancer, prostate cancer, endometrial
XX CC cancer and neuroblastoma. Sequences ABZ75035-ABZ75038 represent Mus
XX CC musculus/Mus spretus STK15 (STK6) probes and PCR primers used in
XX CC expression and amplification analysis of STK15 in an exemplification of
XX CC the invention
XX CC
XX CC Sequence 18 BP; 3 A; 3 C; 10 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 13.4; DB 1; Length 18;
Best Local Similarity 93.3%; Pred. No. 3.5e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1093 ACCCCACCCCTGGGC 1107
DB 15 ACCCTACCCCTGGGC 1
RESULT 328
ACC79763/C
ID ACC79763 standard; DNA; 18 BP.
XX AC ACC79763;
XX DT 29-AUG-2003 (first entry)
XX DE Mouse PDGFR-beta antisense oligonucleotide M-AS-PT-ODN SEQ ID NO:19.
XX KW PDGFR-beta; platelet derived growth factor receptor beta; nanoparticle;
XX KW delivery; encapsulated molecule; cytostatic; antimicrobial; gene therapy;
XX KW sustained delivery; cell proliferation disorder; infectious disease;
XX KW genetic defect; aberrant gene regulation; antisense oligonucleotide;
XX KW phosphorothioate; ss.
XX OS Mus musculus.
XX OS Synthetic.
XX FH Key Location/Qualifiers
FT modified_base 1..4 /*tag= a
FT /*mod_base= OTHER
FT /*note= "phosphorothioate linkages"
FT modified_base 16..18 /*tag= b
FT /*mod_base= OTHER
FT /*note= "phosphorothioate linkages"
XX DN WO2003048298-A2.
XX XX
XX PD 12-JUN-2003.
XX XX
XX PF 05-DEC-2002; 2002WO-IL0000985.
XX XX
XX PR 05-DEC-2001; 2001US-0335837P.
XX XX
XX PA (YISS ) YISSUM RES DEV CO HEBREW UNIV JERUSALEM.
XX XX

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PI Golomb G, Sacks H, Najareh Y;
XX WPI; 2003-523294/49.
XX NP Nanoparticles for sustained delivery of encapsulated molecule into a
XX PT living cell, comprising encapsulation media with biodegradable polymer,
XX PT and isolated nucleic acid homolog sequence encapsulated with medium.
XX PS Claim 18; Page 32; 97pp; English.
XX CC The present invention describes nanoparticles (I) capable of delivery of
XX CC an encapsulated molecule into a living cell, comprising an encapsulation
XX CC media (EM) including a biodegradable polymer, and an isolated nucleic
XX CC acid homolog sequence (II) encapsulated with EM, where the
XX CC nanoparticles are capable of releasing (II) over an extended period of
XX CC time. (I) have cytostatic and antimicrobial activities, and can be used
XX CC in gene therapy. (I) can be used for sustained delivery and release of a
XX CC nucleic acid homolog within a subject, by encapsulating a nucleic acid
XX CC homolog within (I), and introducing (I) into the subject. (I) can also be
XX CC used for treating a medical condition of a subject by sustained delivery
XX CC of nucleic acid homolog, by encapsulating an isolated nucleic acid
XX CC homolog sequence designed to alleviate symptoms of the medical
XX CC condition within EM, so that nanoparticles are formed, and delivering the
XX CC nanoparticles into the subject, where the isolated nucleic acid homolog
XX CC sequence is released over an extended period of time. A pharmaceutical
XX CC composition comprising (I) can be used for treating a medical condition
XX CC including cell proliferation disorder, an infectious disease, a genetic
XX CC defect and aberrant gene regulation. The nanoparticles are capable of
XX CC introducing the nucleic acid into the cell very efficiently. The present
XX CC sequence represents a partial phosphorothioate antisense oligonucleotide
XX CC for platelet derived growth factor receptor beta (PDGFR-beta), which is
XX CC used in an example from the present invention
XX CC
XX CC Sequence 18 BP; 5 A; 3 C; 8 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 13.4; DB 1; Length 18;
Best Local Similarity 93.3%; Pred. No. 3.5e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1096 CCCACCCCTGGGCTTC 1110
DB 17 CCCACCCCTGGGCTTC 3
RESULT 329
ADB54870
ID ADB54870 standard; DNA; 18 BP.
XX AC ADB54870;
XX DT 04-DEC-2003 (first entry)
XX DE Hybridisation oligonucleotide 406 used to analyse genomic DNA region.
XX KW colon cell proliferative disorder; non methylated CpG dinucleotide;
XX KW cytostatic; cancer; adenoma; carcinoma; cytosine methylation state; ss;
XX KW probe.
XX OS Unidentified.
XX XX WO2003072821-A2.
XX PD 04-SEP-2003.
XX XX
XX PF 27-FEB-2003; 2003WO-EP002035.
XX XX
XX PR 27-FEB-2002; 2002EP-00004551.
XX XX
XX PA (EPIG-) EPIGENOMICS AG.
XX XX
XX PI Adorjan P, Burger M, Maier S, Nimmrich I, Becker E, Lesche R;
XX PI Rujan T, Schmitt A;
XX XX

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DR WPI; 2003-731620/69.  
XX Detecting and differentiating between colon cell proliferative disorders  
PT associated with a gene or its regulatory regions comprises contacting a  
PT target nucleic acid in a biological sample obtained from the subject with  
PT a reagent.  
XX  
XX Claim 36; Page 35; 74pp; English.  
XX  
CC The invention relates to a novel method for detecting and differentiating  
CC between colon cell proliferative disorders associated with at least one  
CC gene or its regulatory regions. The method comprises contacting a target  
CC nucleic acid in a biological sample obtained from the subject with at  
CC least one reagent or a series of reagents, where the reagent or series of  
CC reagents, distinguishes between methylated and non methylated CpG  
CC dinucleotides within the target nucleic acid. The molecules of the  
CC invention demonstrate cytostatic activity whilst the method may be useful  
CC for detecting and differentiating between colon cell proliferative  
CC disorders, including cancers such as colon adenoma and colon carcinoma.  
CC The PNA (peptide nucleic acid)-oligomers are useful as probes for  
CC determining cytosine methylation state or single nucleotide  
CC polymorphisms. The current sequence is that of the hybridisation  
CC oligonucleotide of the invention which was used to analyse the genomic  
CC DNA region.  
XX  
SQ Sequence 18 BP; 3 A; 0 C; 6 G; 9 T; 0 U; 0 Other;  
Query Match 0.6%; Score 13.4; DB 1; Length 18;  
Best Local Similarity 93.3%; Pred. No. 3.5e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 992 TTGTTTGGGGAAT 1006  
DB 2 TTGTTGTTGGGAAT 16  
RESULT 330  
ADE43557/c  
ID ADE43557 standard; DNA; 18 BP.  
XX  
AC ADE43557;  
XX  
DT 29-JAN-2004 (first entry)  
XX  
DE Human IDE sequencing primer, SEQ ID 162.  
XX  
KW Neurodegenerative disease; uPA; SNCG; IDE; KNSL1; LIPA; TNFRSF6;  
KW Alzheimer's disease; neuroprotective; nontropic; gene therapy;  
KW Chromosome 10; PCR; primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2003054143-A2.  
XX  
PD 03-JUL-2003.  
XX  
PF 25-OCT-2002; 2002WO-US034679.  
XX  
PR 25-OCT-2001; 2001US-0339525P.  
PR 08-NOV-2001; 2001US-0336929P.  
PR 08-NOV-2001; 2001US-0338010P.  
PR 09-NOV-2001; 2001US-0338363P.  
PR 04-DEC-2001; 2001US-0337052P.  
PR 28-MAR-2002; 2002US-0368919P.  
XX  
PA (NEUR-) NEUROGENETICS INC.  
PA (GEO) GEN HOSPITAL CORP.  
XX  
PI Becker KD, Velicelebi G, Elliott KJ, Wang X, Tanzi RE, Bertram L;  
PI Saunders AJ, Mullin KM, Sampson AJ, Blacker DL;  
XX WPI; 2003-559131/52.  
XX

PT Determining a predisposition for or the occurrence of neurodegenerative  
PT disease, e.g. Alzheimer's disease by detecting in a target nucleic acid  
PT the presence or absence of an allelic variant of one or more polymorphic  
PT regions.  
XX  
XX Example 3; Page 276; 848pp; English.  
XX  
CC The present invention relates to a method (M1) for determining a  
CC predisposition for or the occurrence of neurodegenerative disease in a  
CC subject. The method comprises detecting in a target nucleic acid obtained  
CC from the subject the presence or absence of an allelic variant of one or  
CC more polymorphic regions of one or more genes selected from uPA  
CC (urokinase plasminogen activator), SNCG (gamma-synuclein), IDE (insulin-  
CC degrading enzyme), KNSL1 (Kinesin-like protein 1), LIPA (lysosomal acid  
CC lipase), and TNFRSF6 (Tumour Necrosis Factor Receptor-SF6), where the  
CC presence of at least one of the allelic variant of one or more  
CC polymorphic regions is indicative of a predisposition for or the  
CC occurrence of neurodegenerative disease. The genes are all located on  
CC chromosome 10. M1 is useful for determining a predisposition for or the  
CC occurrence of, and for treating neurodegenerative disease, particularly  
CC Alzheimer's disease. The present sequence is a PCR primer, which was used  
CC in the method of the invention.  
XX  
SQ Sequence 18 BP; 4 A; 7 C; 2 G; 5 T; 0 U; 0 Other;  
Query Match 0.6%; Score 13.4; DB 1; Length 18;  
Best Local Similarity 93.3%; Pred. No. 3.5e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 812 AGAAAGCCTGGAGT 826  
DB 16 AGAGAGCCTGGAGT 2  
RESULT 331  
AAQ20002/c  
ID AAQ20002 standard; DNA; 19 BP.  
XX  
AC AAQ20002;  
XX  
DT 01-APR-1992 (first entry)  
XX  
DE Oligomer Az-A able to covalently cross-link to target DNA.  
XX  
KW deoxyribonucleic acid; major groove; ethanocino group; ss.  
XX  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 5 /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "N4N4-ethanocytosine"  
XX  
XX WO9118997-A.  
XX  
PN 12-DEC-1991.  
XX  
PF 25-MAY-1990; 90US-00529346.  
XX  
PR 25-MAY-1990; 90US-00529346.  
PR 14-JAN-1991; 91US-00640654.  
XX  
PA (GILE-) GILEAD SCIE INC.  
XX  
PI Matteucci MD, Krawczyk S;  
XX WPI; 1992-007480/01.  
XX  
PT New sequence-specific non-photo-activated crosslinking agents - bind to  
PT the major groove of duplex DNA and are esp. useful for treating latent  
PT infections e.g. HIV.  
XX

PS Example 1; Page 18; 42pp; English.

XX Oligomer Az-A was designed to associate specifically with a test cassette. It was found to covalently bind to guanine in the target sequence via the N4N4-ethanocytosine residue. Az-A was tested with a second oligomer (Az-B - see AAZ020003) and both were found to specifically recognise the appropriate cassette differing only in one nucleotide out of 19

XX Sequence 19 BP; 0 A; 8 C; 0 G; 11 T; 0 U; 0 Other;

Query Match 0.6%; Score 13.4; DB 1; Length 19;  
Best Local Similarity 93.3%; Pred. No. 4.1e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1015 GAAAGAGAGGGGAG 1029  
16 GAAAGAGAGGGGAG 2

Db

RESULT 332  
AAZ09895/c  
ID AAZ09895 standard; DNA; 19 BP.

XX AC  
XX AAX09895;

XX 24-MAR-1999 (first entry)

XX Human biallelic polymorphic marker downstream primer #201.

XX Polymorphism; biallelic; human; forensic; paternity testing; disease;  
KW detection; phenotypic typing; characteristic; infection; hereditary;  
KW autoimmune disease; cancer; inflammation; drug; therapy; medicament;  
KW treatment; marker; primer; ss.

XX Synthetic.

OS Homo sapiens.

XX WO9820165-A2.

XX 14-MAY-1998.

XX 05-NOV-1997; 97WO-US020313.

XX 06-NOV-1996; 96US-0030455P.

XX (WHED) WHITEHEAD INST BIOMEDICAL RES.

XX Lander ES, Wang D, Hudson T;

XX WPI; 1998-286974/25.

XX New isolated nucleic acid segments from the human genome - used for  
PT determining polymorphic forms for use in e.g. forensics, paternity  
PT testing or phenotypic typing for disease.

XX Claim 16; Page 69; 310pp; English.

XX AAX09121-X10268 are allele-specific oligonucleotide primers used in the  
CC isolation of various biallelic polymorphic markers found in the human  
CC genome (represented in AAX10269-X12937). These primers can be used in a  
CC method for determining polymorphic forms in an individual for use in e.g.  
CC forensics, paternity testing or for phenotypic typing for diseases such  
CC as adammaglobulinemia, diabetes insipidus, Leach-Nyhan syndrome, muscular  
CC dystrophy, Wiskott-Aldrich syndrome, Fabry's disease, familial  
CC hypercholesterolemia, polycystic kidney disease, hereditary  
CC spherocytosis, von Willebrand's disease, tuberous sclerosis, hereditary  
CC haemorrhagic telangiectasia, familial colonic polyposis, Ehlers-Danlos  
CC syndrome, osteogenesis imperfecta, acute intermittent porphyria,  
CC autoimmune diseases, inflammation, cancer, diseases of the nervous  
CC system, infection by pathogenic microorganisms, and characteristics such  
CC as longevity, appearance (e.g. baldness, obesity), strength, speed,  
CC endurance, fertility, and susceptibility or receptivity to particular

CC drugs or therapeutic treatments. The isolated polymorphic nucleic acid  
CC segments can also be used to produce medicaments for the treatment or  
CC prophylaxis of such diseases

XX Sequence 19 BP; 2 A; 7 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 0.6%; Score 13.4; DB 1; Length 19;  
Best Local Similarity 93.3%; Pred. No. 4.1e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1012 CCTGAAAAGAGGGG 1026  
16 CCTGAAAAGAGGGG 2

Db

RESULT 333  
AAZ72906/c  
ID AAZ72906 standard; DNA; 19 BP.

XX AC  
XX AAZ72906;

XX 10-SEP-2001 (first entry)

XX Human biallelic marker upstream amplification primer SEQ ID NO:7262.

XX Human genome; biallelic marker; high density disequilibrium map;  
KW genomic map; haplotype; phenotype; polymorphic base; genotyping;  
KW haplotyping; hybridisation; identification; characterisation;  
KW amplification; single nucleotide polymorphism; SNP; PCR primer;  
KW diagnosis; ss.

XX Homo sapiens.

XX WO9954500-A2.

XX 28-OCT-1999.

XX 21-APR-1999; 99WO-IB000822.

XX 21-APR-1998; 98US-0082614P.

XX 23-NOV-1998; 98US-0109732P.

XX (GEST) GENSET.

XX Cohen D, Blumenfeld M, Chumakov I;

XX WPI; 2000-013267/01.

XX Novel biallelic markers used to construct a high density disequilibrium  
PT map of the human genome.

XX Claim 9; Page 1779; 2745pp; English.

XX AAZ65654 to AAZ69578 represent human biallelic markers from the present  
CC invention, which contain a polymorphic base at position 24 of their  
CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification  
CC primers for the biallelic markers. The biallelic markers of the invention  
CC have a variety of uses: they can be used for high density mapping of the  
CC human genome, and in complex association studies and haplotyping studies  
CC which are useful in determining the genetic basis for disease states.  
CC Compositions and methods of the invention can also be useful for the  
CC identification of the targets for the development of pharmaceutical  
CC agents and diagnostic methods, as well as the characterisation of the  
CC differential efficacious responses to and side effects from  
CC pharmaceutical agents acting on a disease as well as other treatment.  
CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and  
CC 3367, are not actually given a sequence in the Sequence listing from the  
CC present invention

XX Sequence 19 BP; 1 A; 6 C; 4 G; 8 T; 0 U; 0 Other;

Query Match 0.6%; Score 13.4; DB 1; Length 19;  
Best Local Similarity 93.3%; Pred. No. 4.1e+02;



```

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 862 AAGGGCACTGAGGAC 876
Db 16 AAGGGCACTGAGAAC 2
RESULT 334
AAD09709
ID AAD09709 standard; DNA; 19 BP.
XX
AC AAD09709;
XX
DT 10-SEP-2001 (first entry)
XX
DE Cryptosporidium parvum S60 gene sequencing PCR primer, S15.R11.
XX
KW S60 antigen; protozoacide; vaccine; intestinal infection; diarrhoea;
KW AIDS; Acquired Immune Deficiency Syndrome; cancer; PCR primer; ss.
XX
OS Cryptosporidium parvum.
XX
PN WO200140248-A1.
XX
PD 07-JUN-2001.
XX
PF 01-DEC-2000; 2000WO-AU001492.
XX
PR 01-DEC-1999; 99AU-00004400.
XX
PA (MACQ-) MACQUARIE RES LTD.
XX
PI Winter G, Slade MB, Williams KL, Gooley AA;
XX
DR WPI; 2001-408274/43.
XX
PT Novel nucleic acids encoding antigenic polypeptides of Cryptosporidium
PT useful in antigenic preparations for immunizing animals against
PT Cryptosporidium.
XX
PS Example; Fig 6; 72pp; English.
XX
CC The invention relates to Cryptosporidium parvum S60 potential vaccine
CC antigen and its corresponding DNA molecule. S60 antigens are used in
CC vaccine preparations for immunizing animals, preferably human, against
CC Cryptosporidium. The S60 protein is processed into two glycoproteins S15
CC and S45. This S45 and S15 glycoproteins behave as a single membrane
CC glycoprotein S60. S60 vaccine antigen is used for treating intestinal
CC infections such as diarrhoea in immunosuppressed patients e.g., AIDS
CC (Acquired Immune Deficiency Syndrome), cancer patients and recipients of
CC transplants. The present DNA sequence is PCR primer which is used for
CC sequencing Cryptosporidium parvum S60 gene
XX
SQ Sequence 19 BP; 6 A; 7 C; 3 G; 3 T; 0 U; 0 Other;
Query Match 0.6%; Score 13.4; DB 1; Length 19;
Best Local Similarity 93.3%; Pred. No. 4.1e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1068 AAGCTTCAGTCCAC 1082
Db 5 AAGCTTCAGTACCAC 19
RESULT 335
AAF62156/C
ID AAF62156 standard; DNA; 19 BP.
XX
AC AAF62156;
XX
DT 15-MAY-2001 (first entry)
XX
DE Lam K U primer SEQ ID 11.

```

```

XX Microorganism detection; PCR primer; ss; lambda receptor.
XX Escherichia coli.
XX WO200112853-A1.
XX
PD 22-FEB-2001.
XX
PF 11-AUG-2000; 2000WO-US022029.
XX
PR 13-AUG-1999; 99US-0149365P.
PR 08-AUG-2000; 2000US-00634960.
XX
PA (CORB/) CORBETT C W.
PA (KARL/) KARLSEN F.
XX
PI Karlisen F;
XX
DR WPI; 2001-211234/21.
XX
PT Detecting microorganisms such as Escherichia coli, Enterococcus
PT faecalis/faecium by PCR amplification of E.coli specific lamB gene and
PT E.faecalis/faecium transposase gene Tni546 using novel oligonucleotides.
XX
PS Claim 10; Page 11; 56pp; English.
XX
CC This invention relates to a method for the detection of a microorganism
CC in a sample. The method involves selecting a target DNA sequence in a
CC target gene of a microorganism and detecting its presence in a sample
CC using PCR amplification. The method is useful for detecting bacteria e.g.
CC E.coli, E.faecalis/faecium in a liquid or liquefied sample by PCR. The
CC present sequence represents a PCR primer used in the method of the
CC invention for the detection of Escherichia coli. The primer is based on
CC the sequence of the E. coli lambda receptor gene
XX
SQ Sequence 19 BP; 4 A; 3 C; 9 G; 3 T; 0 U; 0 Other;
Query Match 0.6%; Score 13.4; DB 1; Length 19;
Best Local Similarity 93.3%; Pred. No. 4.1e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1227 CCTTGGCAGACGCGCT 1241
Db 19 CCTTGGCAGACGCGCT 5
RESULT 336
ABA91977
ID ABA91977 standard; DNA; 19 BP.
XX
AC ABA91977;
XX
DT 23-MAY-2002 (first entry)
XX
DE Single nucleotide polymorphism probe BAK/T.
XX
KW Single nucleotide polymorphism; SNP; detection; Taqman; assay; quencher;
KW Hybridisation; human; probe; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PH Key Location/Qualifiers
FT modified_base 1 /*tag= a
FT /*mod_base= OTHER
FT /*note= "dTMR-thymidine"
FT modified_base 19
FT /*tag= b
FT /*mod_base= OTHER
FT /*note= "nitrothiazole blue-cytidine"
XX

```



```

PD 12-DEC-2002.
XX
XX 31-MAY-2002; 2002WO-EP006000.
XX
XX 01-JUN-2001; 2001EP-00112899.
XX
XX (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
XX Penger A, Sprenger R, Brinkmann U;
XX
XX WPI; 2003-167344/16.
XX
XX New polymorphic variants of the gene encoding Cytochrome P450 polypeptide
XX 2C8 (CYP2C8), useful for diagnosing or treating a disease, e.g.
XX arachidonic acid metabolism, cancer or cardiovascular diseases.
XX
XX Claim 1; Page 52; 178pp; English.
XX
XX The invention describes a new polynucleotide comprises a polynucleotide:
XX (a) having any of 101 nucleic acid sequences with 18-19 bp fully defined
XX in the specification; (b) encoding any of seven polypeptides having 7
XX amino acids, or a polypeptide with 3 amino acids; (c) capable of
XX hybridising to a Cytochrome P450 polypeptide 2C8 (CYP2C8) gene; (d)
XX encoding a molecular CYP2C8 variant polypeptide or its fragment. The
XX polynucleotide, gene, vector, polypeptide or antibody is useful for
XX diagnosing or treating a disease, for preparing a diagnostic composition
XX for diagnosing a disease, or for preparing a pharmaceutical composition
XX for treating a disease. This disease includes arachidonic acid
XX metabolism, cancer or cardiovascular diseases. This sequence represents a
XX primer used to isolate regions of the human cytochrome P450 polypeptide
XX 2C8 gene (CYP2C8) in order to identify the single nucleotide polymorphism
XX (SNP) in that region of different individuals useful in disease diagnosis
XX
XX Sequence 19 BP; 9 A; 2 C; 6 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 13.4; DB 1; Length 19;
Best Local Similarity 93.3%; Pred. No. 4.1e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 983 TCTACTCATTGTTT 997
Db 18 TCTGTCATGTTT 4

RESULT 339
ACA98749
ID ACA98749 standard; DNA; 19 BP.
XX
XX ACA98749;
AC
XX
XX 28-JUL-2003 (first entry)
DT
DE
DE Human CYP2C8 SNP detection PCR primer #189.
XX
XX Cytochrome P450 polypeptide 2C8; CYP2C8; arachidonic acid metabolism;
XX cancer; cardiovascular disease; cytostatic; cardiovascular; gene therapy;
XX single nucleotide polymorphism detection; SNP detection; PCR; primer; ss.
XX
XX Homo sapiens.
OS
XX
XX WO200299099-A2.
XX
XX 12-DEC-2002.
PD
XX
XX 31-MAY-2002; 2002WO-EP006000.
XX
XX 01-JUN-2001; 2001EP-00112899.
XX
XX (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
XX Penger A, Sprenger R, Brinkmann U;
XX
XX WPI; 2003-167344/16.
XX
XX New polymorphic variants of the gene encoding Cytochrome P450 polypeptide
XX 2C8 (CYP2C8), useful for diagnosing or treating a disease, e.g.
XX arachidonic acid metabolism, cancer or cardiovascular diseases.
XX
XX Claim 1; Page 52; 178pp; English.
XX
XX The invention describes a new polynucleotide comprises a polynucleotide:
XX (a) having any of 101 nucleic acid sequences with 18-19 bp fully defined
XX in the specification; (b) encoding any of seven polypeptides having 7
XX amino acids, or a polypeptide with 3 amino acids; (c) capable of
XX hybridising to a Cytochrome P450 polypeptide 2C8 (CYP2C8) gene; (d)
XX encoding a molecular CYP2C8 variant polypeptide or its fragment. The
XX polynucleotide, gene, vector, polypeptide or antibody is useful for
XX diagnosing or treating a disease, for preparing a diagnostic composition
XX for diagnosing a disease, or for preparing a pharmaceutical composition
XX for treating a disease. This disease includes arachidonic acid
XX metabolism, cancer or cardiovascular diseases. This sequence represents a
XX primer used to isolate regions of the human cytochrome P450 polypeptide
XX 2C8 gene (CYP2C8) in order to identify the single nucleotide polymorphism
XX (SNP) in that region of different individuals useful in disease diagnosis
XX
XX Sequence 19 BP; 9 A; 2 C; 6 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 13.4; DB 1; Length 19;
Best Local Similarity 93.3%; Pred. No. 4.1e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 983 TCTACTCATTGTTT 997
Db 18 TCTGTCATGTTT 4

RESULT 340
ABX94551/C
ID ABX94551 standard; DNA; 19 BP.
XX
XX ABX94551;
AC
XX
XX 13-JUN-2003 (first entry)
DT
XX
XX 23S/16S rRNA detecting probe SEQ ID 20.
DE
DE
DE Detection; probe; contaminant; drinking water; Legionella; coliform;
XX faecal streptococci; soil; sputum; biopsy; urine; food; pharmaceutical;
XX cosmetic; fluorescent in situ hybridisation; FISH; ss.
XX
XX Streptococcus sp.
OS
XX
XX WO2002102824-A2.
XX
XX 27-DEC-2002.
PD
XX
XX 19-JUN-2002; 2002WO-EP006809.
XX
XX 19-JUN-2001; 2001DE-01029411.
XX
XX 11-DEC-2001; 2001DE-01060666.
XX
XX (VERM-) VERMICON AG.
XX
XX Beinfuhr C, Snaird J;
XX
XX WPI; 2003-167479/16.
XX
XX New oligonucleotides, useful for detecting bacteria that may contaminate
XX drinking water, provide quick results for many species in parallel.
XX
XX Claim 8; Page 13; 53pp; German.
XX
XX This invention describes novel oligonucleotide probes used to detect
XX contaminant bacteria that may be present in drinking water. The probes
XX can detect bacteria (especially Legionella, faecal streptococci and
XX coliforms) that may contaminate drinking water in environmental samples
XX

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CC (water or soil), clinical samples (sputum, biopsies, urine etc.), in  
 CC bathing and drinking water and in foods, pharmaceuticals and cosmetics,  
 CC by in situ hybridisation. The probes combine the advantages of  
 CC fluorescent in situ hybridisation with those of culture methods. Only a  
 CC relatively short culture step is required; analysis takes 24-48 hours  
 CC (contrast many days for conventional methods) and all relevant bacteria  
 CC can be tested simultaneously. The oligonucleotides can differentiate  
 CC between species of the same genus and are easy to use, allowing simple  
 CC analysis of a large number of samples. ABX94532-ABX94578 represent the  
 CC oligonucleotide probes described in the invention  
 XX  
 SQ Sequence 19 BP; 1 A; 6 C; 5 G; 7 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 13.4; DB 1; Length 19;  
 Best Local Similarity 93.3%; Pred. NO. 4.1e+02;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1010 CACCTGAAAAGAGG 1024  
 |||||  
 Db 15 CACCGGAAAAGAGG 1  
 RESULT 341  
 AAV39339/c  
 ID AAV39339 standard; cDNA; 18 BP.  
 XX  
 AC AAV39339;  
 XX  
 DT 16-SEP-1998 (first entry)  
 XX  
 DE Human RAD54 mutation detecting PCR primer SEQ ID NO:47.  
 XX  
 KW Human; RAD54; cancer; xeroderma pigmentosum; Bloom syndrome;  
 KW Werner's syndrome; ATR-X; diagnosis; detection; SNF2 superfamily;  
 KW X-linked mental retardation with alpha-thalassemia syndrome; tumour;  
 KW gene therapy; PCR primer; ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 XX  
 XX EP844305-A2.  
 PN  
 PD 27-MAY-1998.  
 XX  
 XX 10-NOV-1997; 97EP-00308998.  
 XX  
 XX 13-NOV-1996; 96US-0030676P.  
 XX  
 XX (SMIK ) SMITHKLINE BEECHAM CORP.  
 PA (UYJE-) UNIV JEFFERSON THOMAS.  
 XX  
 PI Croce CM, Fishel RA, Rasio D, Robbins DJ;  
 DR WPI; 1998-274189/25.  
 XX  
 XX Human hRAD54 DNA and polypeptide - and agonists, antibodies, antagonists,  
 PT etc.  
 XX  
 PS Claim 18; Page 49; 64pp; English.  
 XX  
 CC The present sequence represents a PCR primer for use in a method of the  
 CC invention for determining the genetic predisposition to cancer in an  
 CC individual by detecting hRAD54 mutations in a sample. hRAD54 is a gene  
 CC thought to be present in tumours that display allelic imbalance at Ip32,  
 CC the chromosomal band identified as one of four minimal regions of  
 CC chromosome 1 deletion in breast carcinomas. hRAD54 is useful for  
 CC production of proteins, inter alia, that have been identified as novel  
 CC hRAD54 by homology between the amino acid sequence given in AAW62186 and  
 CC known amino acid sequences such as yeast RAD54. hRAD54 proteins are used  
 CC in the treatment of cancer, including Xeroderma Pigmentosum and Bloom  
 CC syndrome, Werner's syndromes and X-linked mental retardation with alpha-  
 CC thalassemia syndrome and breast cancer. hRAD54 polynucleotides are also  
 CC useful for detecting complementary nucleotides for use as a diagnostic

CC agent, especially useful for diagnosis of disease or susceptibility to  
 CC diseases. hRAD54 polynucleotide, proteins, agonists and antagonists which  
 CC are proteins are useful in gene therapy  
 XX  
 SQ Sequence 18 BP; 5 A; 6 C; 2 G; 5 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 13.2; DB 1; Length 18;  
 Best Local Similarity 83.3%; Pred. NO. 3.9e+02;  
 Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 853 GAGATGTTAAGGCACCT 870  
 |||||  
 Db 18 GATATGCTTAGGCACCT 1  
 RESULT 342  
 AAZ17892  
 ID AAZ17892 standard; DNA; 18 BP.  
 XX  
 AC AAZ17892;  
 XX  
 DT 11-OCT-1999 (first entry)  
 XX  
 DE RT-PCR primer specific for homeobox gene groups.  
 XX  
 KW Genetic proximity; gene expression; cell characterisation; homeobox gene;  
 KW genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;  
 KW kinase gene; protein phosphatase; P450; steroid receptor; cadherin;  
 KW primer; ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 XX  
 XX WO9934016-A2.  
 PN  
 PD 08-JUL-1999.  
 XX  
 XX 28-DEC-1998; 98WO-IL000625.  
 XX  
 XX 29-DEC-1997; 97IL-00122793.  
 PR  
 PR 16-OCT-1998; 98IL-00126627.  
 XX  
 XX (GENE-) GENENA LTD.  
 PA  
 XX  
 XX Vidar B;  
 PI  
 XX WPI; 1999-419113/35.  
 DR  
 XX  
 PT Identifying and characterizing cells by comparing the pattern of gene  
 PT expression in a selected gene family.  
 XX  
 PS Claim 4; Page 30; 102pp; English.  
 XX  
 CC The invention provides a new method for identifying and characterising  
 CC cells. The method for determining the genetic proximity of a first cell  
 CC and a second cell comprises: (a) obtaining the first cell and the second  
 CC cell; (b) determining in the first cell and the second cell the pattern  
 CC of expression of genes in a selected gene family; and (c) calculating a  
 CC proximity index using a specified formula. The methods can be used for  
 CC characterising cells, e.g. for determining the origin of a cell, its  
 CC genetic status, whether it carries a genetic defect, or whether it is  
 CC transformed. They can be used for detecting a selected genetic defect in  
 CC an individual, e.g. a fetus. They can also be used for determining the  
 CC effect of a selected treatment on a test cell. They can also be used for  
 CC obtaining cells capable of expressing an homeobox related desired  
 CC property. The method uses reverse transcriptase polymerase chain reaction  
 CC (RT-PCR) for determining the pattern of gene expression in a selected  
 CC gene family. Sequences AAZ17803-Z18342 represent primers that can be used  
 CC in the RT-PCR reactions to determine the pattern of gene expression. The  
 CC gene family can be selected from a set of homeobox genes, kinase genes,  
 CC protein phosphatase genes, P450 enzyme genes, steroid receptor  
 CC superfamily genes or cadherin superfamily genes  
 XX

```
SQ Sequence 18 BP; 2 A; 7 C; 5 G; 4 T; 0 U; 0 Other;
Query Match      0.6%; Score 13.2; DB 1; Length 18;
Best Local Similarity 83.3%; Pred. NO. 3.9e+02;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1093 ACCCCACCTGGGCTTC 1110
Db 1 AGCCCGACCTGGGCTTC 18

RESULT 343
AAZ17976
ID AAZ17976 standard; DNA; 18 BP.
XX
AC AAZ17976;
XX
DT 11-OCT-1999 (first entry)
XX
DE Homeobox conserved region OCT specific primer.
XX
KW Genetic proximity; gene expression; cell characterisation; homeobox gene;
KW genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;
KW kinase gene; protein phosphatase; P450; steroid receptor; cadherin;
KW primer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9934016-A2.
XX
PD 08-JUL-1999.
XX
PF 28-DEC-1998; 98WO-IL000625.
XX
PR 29-DEC-1997; 97IL-00122793.
PR 16-OCT-1998; 98IL-00126627.
XX
PA (GENE-) GENENA LTD.
XX
PI Vider B;
XX
WPI; 1999-419113/35.
XX
Identifying and characterizing cells by comparing the pattern of gene
expression in a selected gene family.
XX
Claim 4; Page 34; 102pp; English.
XX
The invention provides a new method for identifying and characterising
cells. The method for determining the genetic proximity of a first cell
and a second cell comprises: (a) obtaining the first cell and the second
cell; (b) determining in the first cell and the second cell the pattern
of expression of genes in a selected gene family; and (c) calculating a
proximity index using a specified formula. The methods can be used for
characterising cells, e.g. for determining the origin of a cell, its
genetic status, whether it carries a genetic defect, or whether it is
transformed. They can be used for detecting a selected genetic defect in
an individual, e.g. a fetus. They can also be used for determining the
effect of a selected treatment on a test cell. They can also be used for
obtaining cells capable of expressing an homeobox related desired
property. The method uses reverse transcriptase polymerase chain reaction
(RT-PCR) for determining the pattern of gene expression in a selected
gene family. Sequences AAZ17803-Z18342 represent primers that can be used
in the RT-PCR reactions to determine the pattern of gene expression. The
gene family can be selected from a set of homeobox genes, kinase genes,
protein phosphatase genes, P450 enzyme genes, steroid receptor
superfamily genes or cadherin superfamily genes
XX
Sequence 18 BP; 2 A; 7 C; 5 G; 4 T; 0 U; 0 Other;
Query Match      0.6%; Score 13.2; DB 1; Length 18;
Best Local Similarity 83.3%; Pred. NO. 3.9e+02;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

SQ Sequence 18 BP; 2 A; 7 C; 5 G; 4 T; 0 U; 0 Other;
Query Match      0.6%; Score 13.2; DB 1; Length 18;
Best Local Similarity 83.3%; Pred. NO. 3.9e+02;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1093 ACCCCACCTGGGCTTC 1110
Db 1 AGCCCGACCTGGGCTTC 18

RESULT 344
AAZ61163
ID AAZ61163 standard; DNA; 18 BP.
XX
AC AAZ61163;
XX
DT 28-JUL-1999 (first entry)
XX
DE Human chromosome alpha-satellite region.
XX
KW Probe; human; chromosome 17 triple-helix forming oligonucleotide;
KW genetic disorder; missing chromosome; aneuploidy; chromosome 21;
KW infectious disease; diagnosis; alpha-satellite region; ss.
XX
OS Homo sapiens.
XX
PN WO9924622-A1.
XX
PD 20-MAY-1999.
XX
PF 10-NOV-1998; 98WO-US023765.
XX
PR 10-NOV-1997; 97US-0064997P.
XX
PA (UYPR-) UNIV PRINCETON.
XX
PI Johnson MD, Fresco JR;
XX
WPI; 1999-327425/27.
XX
Novel use of triple helix forming oligonucleotides, useful for in situ
detection of double stranded target sequence.
XX
Claim 19; Page 12; 45pp; English.
XX
This sequence represents a human chromosome alpha-satellite region. The
invention relates to the use of a triple-helix forming oligonucleotide
for in situ detection of a double-stranded target nucleic acid sequence.
The method can be used to detect a genetic disorder e.g. to detect an
extra or missing chromosome or fragment or aneuploidy, especially for
detecting an extra or missing chromosome 17 or 21. The method can be also
be used to screen for individuals at risk of developing a disease or for
diagnosing an infectious disease. The use of triple helix forming
oligonucleotides allows in situ detection of double stranded target
sequence as opposed to prior art uses of developing potential anti-gene
therapeutic agents or artificial restriction endonucleases
XX
Sequence 18 BP; 1 A; 6 C; 0 G; 11 T; 0 U; 0 Other;
Query Match      0.6%; Score 13.2; DB 1; Length 18;
Best Local Similarity 83.3%; Pred. NO. 3.9e+02;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 927 TTTATCCCTCTCTTCAT 944
Db 1 TTTCTCCCTTCTCTTCAT 18

RESULT 345
AAZ40877/c
ID AAZ40877 standard; DNA; 18 BP.
XX
AC AAZ40877;
XX
DT 26-JAN-2000 (first entry)
XX
```

```

DE Human CD40 phosphorothioate antisense oligonucleotide SEQ ID NO:26.
XX
XX Identification; genetic target; gene modulation; human; probe;
KW antisense oligonucleotide; phosphorothioate; PCR primer;
KW nucleotide sequence-based technology; antisense drug discovery;
KW target validation; ss.
XX
XX Synthetic.
OS Homo sapiens.
XX
XX WO9953101-A1.
PN
XX
XX 21-OCT-1999.
PD
XX
XX 13-APR-1999; 99WO-US008268.
XX
XX 13-APR-1998; 98US-0081483P.
XX
XX 28-APR-1998; 98US-00067638.
PR
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX
XX Cowsert LM, Baker BF, Mcneil J, Freier SM, Sasnor HM, Brooks DG;
XX Ohasi C, Wyatt JR, Borchers AH, Vickers TA;
PI
XX
XX WPI; 1999-620446/53.
DR
XX
XX Identifying compounds which modulate expression of nucleic acids, used to
XX provide compounds having defined physical, chemical or bioactive
XX properties, e.g. antisense activity.
XX
XX Example 8; Page 77; 264pp; English.
XX
XX A method has been developed of defining a set of compounds that modulate
XX the expression of a target nucleic acid (tNA) sequence via binding of the
XX compounds with the tNA sequence. The method comprises generating a
XX library of virtual compounds in silico according to defined criteria, and
XX evaluating in silico the binding of the virtual compounds with the tNA
XX according to defined criteria. Also described are: (1) a method of
XX defining a set of oligonucleotides (ONS) that modulate the expression of
XX a tNA sequence via binding of the ONS with the tNA sequence comprising
XX generating a library of virtual compounds in silico according to defined
XX criteria, and evaluating in silico the binding of the virtual ONS with
XX the tNA according to defined criteria; and (2) a method of defining a set
XX of compounds that modulate the expression of a tNA sequence via binding
XX of the compounds with the tNA. The methods can be used for the generation
XX and identification of synthetic compounds having defined physical,
XX chemical or bioactive properties. Information gathered from assays of
XX such compounds is used to identify nucleic acid sequences that are
XX tractable to a variety of nucleotide sequence-based technologies, e.g.
XX antisense drug discovery and target validation. AAZ40852 to AAZ41220, and
XX AA152701 to AA152706, represent sequences used in the exemplification of
XX the present invention
XX
XX Sequence 18 BP; 2 A; 5 C; 4 G; 7 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 13.2; DB 1; Length 18;
Best Local Similarity 83.3%; Pred. No. 3.9e+02;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1006 TCGACACCTTGAAAAGAG 1023
Db 18 TAGACACCTGGACAGAG 1
RESULT 346
AAZ41069/c
ID AAZ41069 standard; DNA; 18 BP.
XX
XX AAZ41069;
AC
XX
XX 26-JAN-2000 (first entry)
DT
XX
XX Human ELK-1 phosphorothioate antisense oligonucleotide SEQ ID NO:221.
DE

```

```

XX
XX Identification; genetic target; gene modulation; human; probe;
KW antisense oligonucleotide; phosphorothioate; PCR primer;
KW nucleotide sequence-based technology; antisense drug discovery;
KW target validation; ss.
XX
XX Synthetic.
OS Homo sapiens.
XX
XX WO9953101-A1.
PN
XX
XX 21-OCT-1999.
PD
XX
XX 13-APR-1999; 99WO-US008268.
XX
XX 13-APR-1998; 98US-0081483P.
XX
XX 28-APR-1998; 98US-00067638.
PR
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX
XX Cowsert LM, Baker BF, Mcneil J, Freier SM, Sasnor HM, Brooks DG;
XX Ohasi C, Wyatt JR, Borchers AH, Vickers TA;
PI
XX
XX WPI; 1999-620446/53.
DR
XX
XX Identifying compounds which modulate expression of nucleic acids, used to
XX provide compounds having defined physical, chemical or bioactive
XX properties, e.g. antisense activity.
XX
XX Example 24; Page 104; 264pp; English.
XX
XX A method has been developed of defining a set of compounds that modulate
XX the expression of a target nucleic acid (tNA) sequence via binding of the
XX compounds with the tNA sequence. The method comprises generating a
XX library of virtual compounds in silico according to defined criteria, and
XX evaluating in silico the binding of the virtual compounds with the tNA
XX according to defined criteria. Also described are: (1) a method of
XX defining a set of oligonucleotides (ONS) that modulate the expression of
XX a tNA sequence via binding of the ONS with the tNA sequence comprising
XX generating a library of virtual compounds in silico according to defined
XX criteria, and evaluating in silico the binding of the virtual ONS with
XX the tNA according to defined criteria; and (2) a method of defining a set
XX of compounds that modulate the expression of a tNA sequence via binding
XX of the compounds with the tNA. The methods can be used for the generation
XX and identification of synthetic compounds having defined physical,
XX chemical or bioactive properties. Information gathered from assays of
XX such compounds is used to identify nucleic acid sequences that are
XX tractable to a variety of nucleotide sequence-based technologies, e.g.
XX antisense drug discovery and target validation. AAZ40852 to AAZ41220, and
XX AA152701 to AA152706, represent sequences used in the exemplification of
XX the present invention
XX
XX Sequence 18 BP; 6 A; 0 C; 9 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 13.2; DB 1; Length 18;
Best Local Similarity 83.3%; Pred. No. 3.9e+02;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1120 CCCAGTTCACCTTCACC 1137
Db 18 CTCATTCCACCTTCACC 1
RESULT 347
AAZ09753/c
ID AAZ09753 standard; DNA; 18 BP.
XX
XX AAZ09753;
AC
XX
XX 22-NOV-1999 (first entry)
DT
XX
XX Human HM1.24 antigenic protein primer 20.
DE
XX

```

KW Antigenic protein; HM1.24; splice variant; promoter; antirheumatic;  
 KW antiarthritic; bone marrow; tumour cell; drug development; treatment;  
 KW myeloma; rheumatoid arthritis; human; primer; ss.  
 XX  
 OS Synthetic.  
 XX Homo sapiens.  
 XX PN WC9943803-A1.  
 XX PD 02-SEP-1999.  
 XX XX 25-FEB-1999; 99WO-JP000884.  
 XX PR 25-FEB-1998; 98JP-00060617.  
 PR 24-MAR-1998; 98JP-00093883.  
 XX PA (CHUS) CHUGAI SEIYAKU KK.  
 XX PI Ontomo T, Tsuchiya M, Koishihara Y, Koseaka M;  
 XX WPI; 1999-550869/46.  
 XX XX  
 XX Genomic DNA encoding HM1.24 antigen protein as well as splicing variants,  
 PT useful e.g. in development of drugs for treating myeloma and rheumatoid  
 PT arthritis.  
 XX Example 4; Page 76; 83pp; Japanese.  
 XX This invention describes a novel human antigenic protein, HM1.24, its  
 CC encoding nucleic acid, splice variants and promoter region. The products  
 CC of the invention have antirheumatic and antiarthritic activity. The DNA  
 CC of the invention is isolated from bone marrow tumour cells, which can be  
 CC used to study the expression of HM1.24 antigen, promoter activity of its  
 CC promoter region, and in development of drugs in treating e.g. myeloma and  
 CC rheumatoid arthritis. AAZ09744-209754 represent primers used in the  
 CC amplification and isolation of the human HM1.24 antigenic protein  
 CC described in the invention  
 XX  
 XX Sequence 18 BP; 3 A; 10 C; 1 G; 4 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.6%; Score 13.2; DB 1; Length 18;  
 Best Local Similarity 83.3%; Pred. No. 3.9e+02;  
 Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 Qy 1020 AGAGGGGAGCTTGAGG 1037  
 |||||  
 Db 18 AGTGGAGGAGCTTGAGG 1  
 RESULT 348  
 AAZ06585/C  
 ID AAZ06585 standard; DNA; 18 BP.  
 XX AC AAZ06585;  
 XX XX 23-NOV-1999 (first entry)  
 DT ELK-1 expression modulator #24.  
 DE  
 XX Human ELK-1; p62TCF; Ets domain transcription factor protein; apoptosis;  
 KW expression inhibition; infection; inflammation; tumour formation;  
 KW diagnosis; phosphorothioate; antisense compound; ss.  
 XX  
 XX Synthetic.  
 OS  
 XX Key Location/Qualifiers  
 FH modified\_base 1..18  
 FT /\*tag= a  
 FT /note= "Internucleoside phosphorothioate linkages"  
 FT modified\_base 1..4  
 FT /\*tag= b  
 FT /note= "Optionally 2-methoxyethyl (2'-MOE) nucleosides  
 FT except cytosine residues which are 5-methylcytosine"  
 FT

FT modified\_base 15..18  
 FT /\*tag= c  
 FT /note= "Optionally 2-methoxyethyl (2'-MOE) nucleosides  
 FT except cytosine residues which are 5-methylcytosine"  
 XX  
 XX US5948680-A.  
 XX PN 07-SEP-1999.  
 XX PD 17-DEC-1998; 98US-00213767.  
 PF 17-DEC-1998; 98US-00213767.  
 XX PR 17-DEC-1998; 98US-00213767.  
 XX PA (ISIS-) ISIS PHARM INC.  
 XX PI Baker BF, Cowsett LM;  
 XX WPI; 1999-517959/43.  
 XX DR  
 XX Antisense compound useful for diagnosis, treatment and prevention of  
 PT disease associated with ELK-1 expression.  
 PT  
 XX Claim 3; Col 38; 31pp; English.  
 PS  
 XX Sequences AAZ06571-Z06607 are antisense polynucleotides targeted to a  
 CC nucleic acid molecule encoding human ELK-1 (also known as p62TCF). ELK-1  
 CC is a member of the ternary complex factor subfamily of Ets-domain  
 CC transcription factor proteins. The polynucleotides inhibit the expression  
 CC of human ELK-1, and this sequence targets the coding region of the ELK-1  
 CC RNA. Sequences AAZ06571-Z06607 all cause at least 30% inhibition of ELK-1  
 CC expression. The antisense sequences can be used to inhibit the expression  
 CC of human ELK-1 in human cells or tissues in vitro. ELK-1 uses a bipartite  
 CC recognition mechanism mediated by both protein-DNA and protein-protein  
 CC interactions to regulate genes by direct and indirect DNA binding and has  
 CC been shown to control various signal transduction pathways and other cell  
 CC functions including apoptosis. This means that antisense compounds  
 CC inhibiting expression of ELK-1 can be used to treat diseases associated  
 CC with its expression in animals, particularly humans and to prevent or  
 CC delay infection, inflammation or tumour formation. The compounds can also  
 CC be used for diagnosis, as research reagents and in kits  
 XX  
 XX Sequence 18 BP; 6 A; 0 C; 9 G; 3 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.6%; Score 13.2; DB 1; Length 18;  
 Best Local Similarity 83.3%; Pred. No. 3.9e+02;  
 Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 Qy 1120 CCCAGTTCACCTTCACC 1137  
 |||||  
 Db 18 CTCATTTCACCTTCACC 1  
 RESULT 349  
 AAZ90740  
 ID AAZ90740 standard; DNA; 18 BP.  
 XX AC AAZ90740;  
 XX XX 19-JUN-2000 (first entry)  
 DT Reverse primer for amplifying human KVLQT1 exon 16.  
 DE  
 XX KVLQT1; KCNE1; long QT syndrome; LQT syndrome; minK protein;  
 KW antiarrhythmic; gene therapy; human; PCR primer; ss.  
 XX  
 XX Homo sapiens.  
 OS  
 XX WO200006600-A1.  
 PN 10-FEB-2000.  
 PD 06-OCT-1998; 98WO-US017838.  
 PF XX

```

PR 29-JUL-1998; 98US-0094477P.
PR 17-AUG-1998; 98US-00135020.
PA (UTAH) UNIV UTAH RES FOUND.
PI Keating MT, Sanguinetri MC, Splawski I;
XX WPI; 2000-195262/17.
XX Mutant forms of genes encoding minK protein and KvLQT1 protein involved
PT in cardiac potassium channel formation useful for screening drugs, for
PT preventing and treating cardiac arrhythmia.
XX Example 11; Page 70; 167pp; English.
XX The invention relates to KvLQT1 and KCNE1 genes, associated with long QT
CC (LQT) syndrome. It provides a minK protein comprising a mutation which
CC substitutes the wild type amino acids with Leu, Asp, Leu, His, Trp and
CC Ala or Thr at residues 74, 76, 28, 32, 98 and 127 respectively. Screening
CC KvLQT1 and KCNE1 is useful for identifying mutations for diagnosing and
CC treating LQT. The ability to predict LQT enables physicians to prevent
CC the diseases with medical therapy such as beta blocking agents and ops
CC for better treatments. Sequences AAZ90707-Z90740 represent PCR primers
CC for amplifying human KvLQT1 exons
XX
XX Sequence 18 BP; 3 A; 12 C; 1 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 13.2; DB 1; Length 18;
Best Local Similarity 83.3%; Pred. No. 3.9e+02;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1253 CCATCCCGCACCCCTTC 1270
DB 1 CCATCCCGCACCCCATC 18
RESULT 350
AAZ47710/C
ID AAZ47710 standard; DNA; 18 BP.
AC AAZ47710;
XX
XX 02-MAR-2000 (first entry)
DE Human CD40 antisense oligonucleotide SEQ ID NO:26.
XX Human; CD40; antisense oligonucleotide; phosphorothioate; modulation;
XX expression; immune disease; inflammatory disease; immunomodulatory;
XX anti-inflammatory; anti-arthritis; anti-asthmatic; antiproliferative;
XX anticancer; immuno-suppressive; anti-psoriatic; allograft rejection;
XX hyperproliferative disease; autoimmune disease; rheumatoid arthritis;
XX inflammatory bowel disease; asthma; psoriasis; cancer; tumour; ss.
XX Synthetic.
OS Homo sapiens.
XX
XX WO9957320-A1.
PN
XX 11-NOV-1999.
PD
XX 22-APR-1999; 99WO-US008765.
PF
XX 01-MAY-1998; 98US-00071433.
PR
XX (ISIS-) ISIS PHARM INC.
PA
XX Bennett CF, Cowsett LM;
XX WPI; 2000-062158/05.
XX
XX Antisense molecules directed against nucleic acid encoding human CD40,
XX for treating e.g. immune, inflammatory or hyperproliferative diseases.
XX
PS Claim 3; Page 43; 102pp; English.
XX AAZ47685 to AAZ47768 represent phosphorothioate antisense
CC oligonucleotides targeted to human CD40, which can be used to inhibit the
CC expression of human CD40. CD40 is involved in lymphocyte activation,
CC tumour growth and/or angiogenesis. Inhibition of CD40 is used to treat or
CC prevent immune-associated diseases (specifically guest vs. host disease,
CC allograft rejection or autoimmune diseases); inflammation (specifically
CC asthma, rheumatoid arthritis, allograft rejection, inflammatory bowel
CC disease or psoriasis) or hyperproliferation (specifically cancer and
CC tumours). The antisense oligonucleotides are also useful as diagnostic
CC and research reagents. AAZ47769 represents the human CD40 nucleotide
CC sequence. AAZ47770 to AAZ47772 represent human CD40 forward and reverse
CC PCR primers, and a human CD40 PCR probe, respectively. AAZ47773 to
CC AAZ47775 represent other PCR primers and a probe used in the
CC exemplification of the present invention
XX
XX Sequence 18 BP; 2 A; 5 C; 4 G; 7 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 13.2; DB 1; Length 18;
Best Local Similarity 83.3%; Pred. No. 3.9e+02;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1006 TCGACACCTGAAAAGAG 1023
DB 18 TAGACACCTGGACACAG 1
RESULT 351
AAZ70521/C
ID AAZ70521 standard; DNA; 18 BP.
AC AAZ70521;
XX
XX 10-SEP-2001 (first entry)
DE Human biallelic marker upstream amplification primer SEQ ID NO:4877.
XX Human genome; biallelic marker; high density disequilibrium map;
XX genomic map; haplotype; phenotype; polymorphic base; genotyping;
XX haplotyping; hybridisation; identification; characterisation;
XX amplification; single nucleotide polymorphism; SNP; PCR primer;
XX diagnosis; ss.
XX Homo sapiens.
XX
XX WO9954500-A2.
PN
XX 28-OCT-1999.
PD
XX 21-APR-1999; 99WO-IB000822.
PF
XX 21-APR-1998; 98US-0082614P.
PR 23-NOV-1998; 98US-0109732P.
XX
XX (GEST) GENSET.
PA
XX Cohen D, Blumenfeld M, Chumakov I;
XX WPI; 2000-013267/01.
XX
XX Novel biallelic markers used to construct a high density disequilibrium
PT map of the human genome.
PT
XX Claim 8; Page 1271; 2745pp; English.
PS
XX AAZ65654 to AAZ69578 represent human biallelic markers from the present
CC invention, which contain a polymorphic base at position 24 of their
CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
CC primers for the biallelic markers. The biallelic markers of the invention
CC have a variety of uses: they can be used for high density mapping of the
CC human genome, and in complex association studies and haplotyping studies
CC which are useful in determining the genetic basis for disease states.
CC

```



CC Compositions and methods of the invention can also be useful for the  
CC identification of the targets for the development of pharmaceutical  
CC agents and diagnostic methods, as well as the characterisation of the  
CC differential efficacious responses to and side effects from  
CC pharmaceutical agents acting on a disease as well as other treatment.  
CC N.B. The SEQ ID Nos 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and  
CC 3367, are not actually given a sequence in the Sequence Listing from the  
CC present invention  
XX  
SQ Sequence 18 BP; 6 A; 0 C; 9 G; 3 T; 0 U; 0 Other;  
Query Match 0.6%; Score 13.2; DB 1; Length 18;  
Best Local Similarity 83.3%; Pred. No. 3.9e+02;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
Oy 1130 CTTTCACCTCCAGCTCCA 1147  
Db 18 CTTTACCTCCACCTCCA 1  
RESULT 352  
AAZ69754/C  
ID AAZ69754 standard; DNA; 18 BP.  
XX  
AC AAZ69754;  
XX  
DT 10-SEP-2001 (first entry)  
XX  
DE Human biallelic marker upstream amplification primer SEQ ID NO:4110.  
XX  
KW Human genome; biallelic marker; high density disequilibrium map;  
KW genomic map; haplotype; phenotype; polymorphic base; genotyping;  
KW haplotyping; hybridisation; identification; characterisation;  
KW amplification; single nucleotide polymorphism; SNP; PCR primer;  
KW diagnosis; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO9954500-A2.  
XX  
PD 28-OCT-1999.  
XX  
PF 21-APR-1999; 99WO-IB000822.  
XX  
PR 21-APR-1998; 98US-0082614P.  
XX  
PR 23-NOV-1998; 98US-0109732P.  
XX  
PA (GEST ) GENSET.  
XX  
PI Cohen D, Blumenfeld M, Chumakov I;  
XX  
DR WPI; 2000-013267/01.  
XX  
PT Novel biallelic markers used to construct a high density disequilibrium  
XX map of the human genome.  
XX  
PS Claim 8; Page 1107; 2745pp; English.  
XX  
CC AAZ65654 to AAZ69578 represent human biallelic markers from the present  
CC invention, which contain a polymorphic base at position 24 of their  
CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification  
CC primers for the biallelic markers. The biallelic markers of the invention  
CC have a variety of uses: they can be used for high density mapping of the  
CC human genome, and in complex association studies and haplotyping studies  
CC which are useful in determining the genetic basis for disease states.  
CC Compositions and methods of the invention can also be useful for the  
CC identification of the targets for the development of pharmaceutical  
CC agents and diagnostic methods, as well as the characterisation of the  
CC differential efficacious responses to and side effects from  
CC pharmaceutical agents acting on a disease as well as other treatment.  
CC N.B. The SEQ ID Nos 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and  
CC 3367, are not actually given a sequence in the Sequence Listing from the  
CC present invention

XX  
SQ Sequence 18 BP; 2 A; 3 C; 6 G; 7 T; 0 U; 0 Other;  
Query Match 0.6%; Score 13.2; DB 1; Length 18;  
Best Local Similarity 83.3%; Pred. No. 3.9e+02;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
Oy 813 GAAAGCCTGCACTGCAC 830  
Db 18 GAAAGCCTCACTGCAC 1  
RESULT 353  
AAZ98970  
ID AAZ98970 standard; DNA; 18 BP.  
XX  
AC AAZ98970;  
XX  
DT 06-JUN-2000 (first entry)  
XX  
DE Human long QT syndrome-associated KVLQT1 exon 16 reverse primer.  
XX  
KW KVLQT1; mutation; human; cardiac I (Ks) potassium channel; KCNE1; ss;  
KW cardiac arrhythmia; electrocardiogram; long QT syndrome; gene therapy;  
KW chromosome 11p15.5; PCR primer.  
XX  
OS Homo sapiens.  
XX  
XX WO200006199-A1.  
XX  
PD 10-FEB-2000.  
XX  
PF 12-MAY-1999; 99WO-US010260.  
XX  
PR 29-JUL-1998; 98US-0094477P.  
XX  
PR 17-AUG-1998; 98US-00135010.  
XX  
PA (UTAH ) UNIV UTAH RES FOUND.  
XX  
PA (GENZ ) GENZYME CORP.  
XX  
XX Keating MT, Sanguinetti MC, Curran ME, Landes GM, Connors TD;  
PI Burn TC, Splawski I;  
XX  
XX WPI; 2000-195199/17.  
XX  
PT New isolated mutant KVLQT1 nucleic acids, useful for developing products  
XX for the diagnosis, prevention and treatment of long QT syndrome.  
XX  
PS Claim 27; Page 73; 178pp; English.  
XX  
CC The invention relates to KVLQT1 nucleic acids which have a mutation  
CC compared to wild-type KVLQT1 (AAZ98901) The KVLQT1 gene encodes a protein  
CC of 676 amino acids which forms a cardiac I(Ks) potassium channel with the  
CC KCNE1 protein (AAZ80563). The KVLQT1 gene contains 15 introns and encodes  
CC a protein containing 6 putative transmembrane segments and a pore forming  
CC region. The gene has been mapped to the chromosomal location 11p15.5. The  
CC sequences AAZ98937-98970 represent primers used to PCR amplify the  
CC KVLQT1 exon sequences. Mutations in the KVLQT1 or KCNE1 genes result in  
CC cardiac arrhythmias observed as a prolonged QT curve in  
CC electrocardiograms (long QT syndrome). The genes and proteins can be used  
CC for the diagnosis of subjects with long QT syndrome. They can also be  
CC used to screen for drugs which can be used for treating or preventing  
CC long QT syndrome. The KVLQT1 nucleic acids can be used for gene therapy,  
CC and KVLQT1 peptides can be used for peptide therapy  
XX  
SQ Sequence 18 BP; 3 A; 12 C; 1 G; 2 T; 0 U; 0 Other;  
Query Match 0.6%; Score 13.2; DB 1; Length 18;  
Best Local Similarity 83.3%; Pred. No. 3.9e+02;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
Oy 1253 CCATCCCAACCCCTTC 1270  
|||||

```

Db      1 CCATCCCGCCAGCCCATC 18
        Single nucleotide polymorphism; SNP; human; genetic disease;
        disease susceptibility; cardiovascular system; endocrine system;
        neurological system; forensic testing; paternity testing; PCR primer; ss.

RESULT 354
AAC70583
ID      AAC70583 standard; DNA; 18 BP.
XX
AC      AAC70583;
XX
DT      09-FEB-2001 (first entry)
XX
DE      Single nucleotide polymorphism PCR primer #276.
XX
KW      Single nucleotide polymorphism; SNP; human; genetic disease;
KW      disease susceptibility; cardiovascular system; endocrine system;
KW      neurological system; forensic testing; paternity testing; PCR primer; ss.
XX
OS      Homo sapiens.
XX
PN      WO200058519-A2.
XX
PD      05-OCT-2000.
XX
PF      30-MAR-2000; 2000WO-US008440.
XX
PR      31-MAR-1999; 99US-0127248P.
XX
(WHEAD ) WHITEHEAD INST BIOMEDICAL RES.
(AFFY-) AFFYMETRIX INC.
XX
PI      Altshuler D, Cargill M, Daley GQ, Ireland JS, Lander ES;
PI      Lipshutz RJ, Patil N, Sklar P;
XX
WPI; 2000-611722/58.
XX
Nucleic acid selected from one of 106 genes comprising single nucleotide
PT      polymorphisms, allele-specific oligonucleotides to the genes are useful
PT      for phenotypic correlations, forensics, paternity testing, medicine and
PT      genetic analysis.
XX
PS      Claim 8; Fig 5; 214pp; English.
XX
The present invention is concerned with a number of human single
CC      nucleotide polymorphisms (SNPs) which the inventors identified in human
CC      genes. These SNPs can be used in disease diagnosis and prediction of an
CC      individual's susceptibility to disease, in forensic and paternity testing
CC      and in genetic mapping. In particular, the SNPs of the invention can be
CC      used to diagnose susceptibility to diseases of the cardiovascular,
CC      endocrine and neurological systems, such as coronary artery disease,
CC      schizophrenia, cancer, autoimmune diseases, Alzheimer's and Parkinson's
CC      diseases
XX
SQ      Sequence 18 BP; 2 A; 7 C; 5 G; 4 T; 0 U; 0 Other;

Query Match      0.6%; Score 13.2; DB 1; Length 18;
Best Local Similarity 83.3%; Pred. No. 3.9e+02;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY      1197 GGCACCCACCTATCAGG 1214
        ||||| ||||| ||||| |||||
Db      1 GGCATCACCTCTCTGGG 18

RESULT 356
AAC70529
ID      AAC70529 standard; DNA; 18 BP.
XX
AC      AAC70529;
XX
DT      09-FEB-2001 (first entry)
XX
DE      Single nucleotide polymorphism PCR primer #240.
XX
KW      Single nucleotide polymorphism; SNP; human; genetic disease;
KW      disease susceptibility; cardiovascular system; endocrine system;
KW      neurological system; forensic testing; paternity testing; PCR primer; ss.
XX
OS      Homo sapiens.
XX
PN      WO200058519-A2.
XX
PD      05-OCT-2000.
XX
PF      30-MAR-2000; 2000WO-US008440.
XX
PR      31-MAR-1999; 99US-0127248P.
XX

```

```

XX (WHEED ) WHITEHEAD INST BIOMEDICAL RES.
PA (AFFY-) AFFYMETRIX INC.
XX
XX Altshuler D, Carrill M, Daley GQ, Ireland JS, Lander ES;
PI Lipshutz RJ, Patil N, Sklar P;
XX WPI; 2000-611722/58.
XX
XX Nucleic acid selected from one of 106 genes comprising single nucleotide
PT polymorphisms, allele-specific oligonucleotides to the genes are useful
PT for phenotypic correlations, forensics, paternity testing, medicine and
PT genetic analysis.
XX
XX Claim 8; Fig 5; 214pp; English.
XX
XX The present invention is concerned with a number of human single
CC nucleotide polymorphisms (SNPs) which the inventors identified in human
CC genes. These SNPs can be used in disease diagnosis and prediction of an
CC individual's susceptibility to disease, in forensic and paternity testing
CC and in genetic mapping. In particular, the SNPs of the invention can be
CC used to diagnose susceptibility to diseases of the cardiovascular,
CC endocrine and neurological systems, such as coronary artery disease,
CC schizophrenia, cancer, autoimmune diseases, Alzheimer's and Parkinson's
CC diseases
XX
XX Sequence 18 BP; 2 A; 7 C; 5 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 13.2; DB 1; Length 18;
Best Local Similarity 83.3%; Pred. No. 3.9e+02;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
QY 1197 GGCACCCCTATCAGG 1214
DB 1 GGCATCACCTCTCTGG 18
XX
RESULT 357
AAC89980
ID AAC89980 standard; DNA; 18 BP.
XX
XX AAC89980;
AC
XX
XX 08-MAR-2001 (first entry)
DT
XX
XX Human KVLQTI exon 16 PCR primer #2.
DE
XX
XX Human; KVLQTI; antiarrhythmic; cardiant; gene therapy; PCR primer;
KW cardiac potassium channel; Jervell and Lange-Nielsen Syndrome; JLN;
KW chromosome 11p15.5; long QT syndrome; ss.
XX
XX Homo sapiens.
OS
XX
XX US6150104-A.
FN
XX
XX 21-NOV-2000.
PD
XX
XX 17-AUG-1998; 98US-00135021.
PF
XX
XX 13-JUN-1997; 97US-00874655.
PR
XX 29-JUL-1998; 98US-0094477P.
XX
XX (UTAH ) UNIV UTAH RES FOUND.
PA
XX
XX Keating MT, Splawski I;
PI
XX
XX WPI; 2001-060013/07.
DR
XX
XX DNA encoding for a mutant KVLQTI which causes Jervell and Lange-Nielsen
PT syndrome (JLN) when homozygous, useful for diagnosing long QT syndrome,
PT or diagnosing or prognosing JLN.
XX
XX Example 5; Col 45-46; 58pp; English.
PS
XX
XX KVLQTI is a cardiac potassium channel and mutations in the KVLQTI gene
CC cause Jervell and Lange-Nielsen Syndrome (JLN). KVLQTI maps to chromosome
CC 11p15.5. The present invention relates to a mutant KVLQTI coding sequence
CC (see AAC89914). The mutant KVLQTI coding sequence is useful in the
CC diagnosis of long QT syndrome and in screening humans for the presence of
CC KVLQTI gene variants which cause JLN syndrome. The present sequence is a
CC PCR primer used to amplify a KVLQTI exon
XX
SQ Sequence 18 BP; 3 A; 12 C; 1 G; 2 T; 0 U; 0 Other;
Query Match 0.6%; Score 13.2; DB 1; Length 18;
Best Local Similarity 83.3%; Pred. No. 3.9e+02;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
QY 1253 CCATCCCCAACCCCTTC 1270
DB 1 CCATCCCCAGCCCCATC 18
XX
RESULT 358
ABK13428/C
ID ABK13428 standard; DNA; 18 BP.
XX
XX ABK13428;
AC
XX
XX 23-APR-2002 (first entry)
DT
XX
XX Drosophila rot gene PCR primer Del-4860.
DE
XX
XX Fruit fly; ss; rotkehlchen; rot; insecticide; MYST; acaricide; Del-4860;
KW PCR; primer.
XX
XX Drosophila melanogaster.
OS
XX
XX WO200200864-A2.
FN
XX
XX 03-JAN-2002.
PD
XX
XX 08-JUN-2001; 2001WO-EP006505.
PF
XX
XX 27-JUN-2000; 2000EP-00113527.
PR
XX
XX (AVET ) AVENTIS CROPS SCIENCE GMBH.
PA
XX
XX Pankratz MJ, Zinke I, Luenmen P, Benting J, Gunkel N;
PI
XX
XX WPI; 2002-130888/17.
DR
XX
XX Novel isolated DNA molecule encoding protein having biological activity
PT of histone acetyltransferase which is useful for screening histone
PT acetyltransferase inhibitors that serve as insecticides and acaricides.
XX
XX Example B; Page 22; 61pp; English.
PS
XX
XX The invention relates to an isolated DNA molecule comprising a DNA
CC sequence which encodes an insect histone acetyltransferase (HAT a member
CC of the MYST family which regulates food uptake) and is either the
CC Rotkehlchen (rot) gene or the rot cDNA, or their fragments, derivatives
CC or allelic variants. Also included are a vector comprising the nucleic
CC acids, a eukaryotic cell harbouring the vector or nucleic acids and an
CC assay for detecting inhibitor molecules that have an effect on the
CC biochemical activity of HAT when compared with the non-treated control
CC protein in presence of suitable substrate, buffer and assay conditions.
CC The vector is useful for the recombinant production of ROT. ROT is useful
CC for the biochemical or structural characterisation of the potential
CC inhibitors of the encoded protein. The inhibitor, in appropriate chemical
CC compositions, is useful for an insect controlling method based on
CC specific inhibition or sufficient reduction of activity of the native
CC target protein (Rotkehlchen (ROT) protein which is a HAT that belongs to
CC the so called MYST family of HAT) in an insect. ROT protein is useful as
CC insecticide or acaricide. The inhibitor has agrochemistry, veterinary and
CC pharmaceutical applications. The present sequence is a PCR primer used to

```



CC occurrence of neurodegenerative disease. The genes are all located on  
 CC chromosome 10. M1 is useful for determining a predisposition for or the  
 CC occurrence of, and for treating neurodegenerative disease, particularly  
 CC Alzheimer's disease. The present sequence is a PCR primer, which was used  
 CC in the method of the invention.

XX SQ Sequence 18 BP; 5 A; 7 C; 3 G; 3 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 13.2; DB 1; Length 18;  
 Best Local Similarity 83.3%; Pred. No. 3.9e+02;  
 Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1116 CGTCCCGAGTTCCACCTT 1133  
 || ||||| |||||  
 Db 1 CGAGCCCGAGTCAACCTT 18

## RESULT 361

AD43738  
 ID ADE43738 standard; DNA; 18 BP.

XX AC ADE43738;

XX DT 29-JAN-2004 (first entry)

XX XX Human KNSL1 sequencing primer, SEQ ID 343.

XX XX Neurodegenerative disease; uPA; SNCG; IDE; KNSL1; LIPA; TNFRSF6;

XX KW Alzheimer's disease; neuroprotective; nontropic; gene therapy;

XX KW Chromosome 10; PCR; primer; ss.

XX OS Homo sapiens.

XX XX WO2003054143-A2.

XX PD 03-JUL-2003.

XX XX 25-OCT-2002; 2002WO-US034679.

XX XX 25-OCT-2001; 2001US-0339525P.

PR 08-NOV-2001; 2001US-0336929P.

PR 08-NOV-2001; 2001US-0338010P.

PR 09-NOV-2001; 2001US-0338363P.

PR 04-DEC-2001; 2001US-0337052P.

PR 28-MAR-2002; 2002US-0368919P.

XX XX (NEUR-) NEUROGENETICS INC.

XX XX (GEO) GEN HOSPITAL CORP.

XX PI Becker KD, Velicelbi G, Elliott KJ, Wang X, Tanzi RE, Bertram L;  
 XX PI Saunders AJ, Mullin KM, Sampson AJ, Blacker DL;

XX XX WPI; 2003-559131/52.

XX XX Determining a predisposition for or the occurrence of neurodegenerative  
 XX XX disease, e.g. Alzheimer's disease by detecting in a target nucleic acid  
 XX XX the presence or absence of an allelic variant of one or more polymorphic  
 XX XX regions.

XX PS Example 3; Page 292; 848pp; English.

XX XX The present invention relates to a method (M1) for determining a  
 XX XX predisposition for or the occurrence of neurodegenerative disease in a  
 XX XX subject. The method comprises detecting in a target nucleic acid obtained  
 XX XX from the subject the presence or absence of an allelic variant of one or  
 XX XX more polymorphic regions of one or more genes selected from uPA  
 XX XX (Urokinase plasminogen activator), SNCG (gamma-synuclein), IDE (insulin-  
 XX XX degrading enzyme), KNSL1 (Kinesin-like protein 1), LIPA (lysosomal acid  
 XX XX lipase), and TNFRSF6 (Tumour Necrosis Factor Receptor-SF6), where the  
 XX XX presence of at least one of the allelic variant of one or more  
 XX XX polymorphic regions is indicative of a predisposition for or the  
 XX XX occurrence of neurodegenerative disease. The genes are all located on  
 XX XX chromosome 10. M1 is useful for determining a predisposition for or the

CC occurrence of, and for treating neurodegenerative disease, particularly  
 CC Alzheimer's disease. The present sequence is a PCR primer, which was used  
 CC in the method of the invention.

XX SQ Sequence 18 BP; 5 A; 7 C; 3 G; 3 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 13.2; DB 1; Length 18;  
 Best Local Similarity 83.3%; Pred. No. 3.9e+02;  
 Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1116 CGTCCCGAGTTCCACCTT 1133  
 || ||||| |||||  
 Db 1 CGAGCCCGAGTCAACCTT 18

## RESULT 362

ABK68350/C

ID ABK68350 standard; DNA; 21 BP.

XX AC ABK68350;

XX DT 02-JUL-2002 (first entry)

XX XX Mouse HYPLIPI locus specific primer 412D2T #1.

XX XX Mouse; primer; antilipaeamic; cardiant; hypotensive; anorectic; HYPLIPI;

XX KW FCHL1; lipid disorder; familial combined hyperlipidaemia;

XX KW coronary artery disease; atherogenic lipoprotein phenotype; cancer;

XX KW hyperapobetalipoproteinaemia; hypertriglyceridaemia; obesity; ss;

XX KW familial dyslipidaemic hypertension; syndrome X; insulin resistance;

XX KW hypercholesterolaemia; chromosome 3.

XX OS Mus sp.

XX XX WO200220847-A2.

XX PD 14-MAR-2002.

XX XX 07-SEP-2001; 2001WO-US028181.

PR 08-SEP-2000; 2000US-0231322P.

XX XX (REGC) UNIV CALIFORNIA.

XX PI Bodnar JS, Castellani LW, Chatterjee A, De Jong P, Lusis AJ;

XX PI Ohmen J, Ross D, Tafuri S, Wu C;

XX XX WPI; 2002-339808/37.

XX XX Novel HYPLIPI and FCHL1 genes and their sequence variations associated  
 XX XX with lipid disorder and cancer, useful for prognosis, diagnosis and  
 XX XX treatment of lipid disorders.

XX PS Claim 11; Page 77; 102pp; English.

XX XX This invention relates to the cDNA and protein sequences of novel  
 XX XX proteins HYPLIPI or FCHL1 and to sequence variations within these genes  
 XX XX that have been shown to be associated with lipid disorders.  
 XX XX Oligonucleotide probes that hybridise to the cDNA sequence are useful for  
 XX XX analysing the expression of FCHL1 by detecting the expression of the mRNA  
 XX XX transcript in the sample. A host cell transformed with the cDNA of the  
 XX XX invention is useful for producing the protein by recombinant means.  
 XX XX Pharmaceutical compositions based on the sequences of the invention are  
 XX XX useful for treating or preventing a lipid disorder associated with  
 XX XX expression of FCHL1 such as familial combined hyperlipidaemia, coronary  
 XX XX artery disease, atherogenic lipoprotein phenotype,  
 XX XX hyperapobetalipoproteinaemia, hypertriglyceridaemia, familial  
 XX XX dyslipidaemic hypertension, syndrome X, obesity, insulin resistance and  
 XX XX hypercholesterolaemia. The cDNA sequence is useful in the diagnosis or  
 XX XX prognosis of predisposition to lipid disorders and cancers, and also to  
 XX XX identify a molecule which enhances or decreases the HYPLIPI or FCHL1  
 XX XX activity. The present sequence represents an oligonucleotide primer  
 XX XX specific for the mouse HYPLIPI locus of the invention. The mouse HYPLIPI

```

CC locus is situated on chromosome 3
XX Sequence 21 BP; 3 A; 8 C; 6 G; 4 T; 0 U; 0 Other;
SQ
  Query Match      0.6%; Score 13.2; DB 1; Length 21;
  Best Local Similarity 83.3%; Pred. No. 6.2e+02;
  Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
  QY 36 GGAGCCTCAGTCCAGAGA 53
  Db 20 GGAGCCTGAGTCTCTAGA 3
  RESULT 363
  ID ABK71254/c
  XX ABK71254 standard; DNA; 21 BP.
  AC ABK71254;
  XX
  DT 15-JUL-2002 (first entry)
  XX
  DE Mouse HYPLIPI1 locus PCR primer #327.
  XX
  KW Human; mouse; HYPLIPI1; FCHL1; familial combined hyperlipidaemia; cancer;
  KW lipid disorder; PCR; primer; ss.
  XX
  OS Mus sp.
  XX
  PN WO200220848-A2.
  XX
  PD 14-MAR-2002.
  XX
  PF 07-SEP-2001; 2001WO-US028182.
  XX
  PR 08-SEP-2000; 2000US-0231322P.
  XX
  PA (RESC ) UNIV CALIFORNIA.
  XX
  PI Bodnar JS, Castellani LW, Chatterjee A, De Jong P, Lusis AJ;
  PI Ohmen J, Ross D, Tafuri S, Wu C;
  XX
  DR WPI; 2002-329882/36.
  XX
  PT New mouse HYPLIPI1 and human FCHL1 (familial combined hyperlipidemia)
  PT genes and their sequence variations, useful for diagnosing, treating or
  PT preventing lipid disorders and cancers.
  XX
  PS Claim 11; Page 77; 102pp; English.
  XX
  CC The invention relates to an isolated polynucleotide comprising a sequence
  CC variation of a mouse HYPLIPI1 cDNA or a human FCHL1 (familial combined
  CC hyperlipidaemia) gene. The FCHL1 polynucleotide, the FCHL1 polypeptide or
  CC antibody immunoreactive to the FCHL1 polypeptide are useful for treating
  CC or preventing cancer associated with expression of FCHL1, as well as for
  CC treating lipid disorder. The mouse HYPLIPI1 cDNA or human FCHL1 gene are
  CC also useful for diagnosing or prognosing a predisposition to lipid
  CC disorder and cancer. ABK70902-ABK71303 represent mouse HYPLIPI1, human
  CC FCHL1 coding sequences and PCR primers of the invention
  XX
  SQ Sequence 21 BP; 3 A; 8 C; 6 G; 4 T; 0 U; 0 Other;
  Query Match      0.6%; Score 13.2; DB 1; Length 21;
  Best Local Similarity 83.3%; Pred. No. 6.2e+02;
  Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
  QY 36 GGAGCCTCAGTCCAGAGA 53
  Db 20 GGAGCCTGAGTCTCTAGA 3
  RESULT 364
  ID ADAL5393/c
  ADAL5393 standard; DNA; 21 BP.
  ADAL5393;
  06-NOV-2003 (first entry)
  Mouse HYPLIPI1 locus PCR primer #333.
  Mouse; PCR; primer; ss; HYPLIPI1; FCHL1; variation; lipid disorder;
  allele; anti-lipid disorder; anti-cancer therapy; gene therapy;
  familial combined hyperlipidaemia; coronary artery disease;
  atherogenic lipoprotein phenotype; hyperapobetalipoproteinaemia;
  hypertriglyceridaemia; low density lipoprotein subclass B; LDL;
  familial dyslipidemic hypertension; syndrome X; hypercholesterolaemia;
  obesity; insulin resistance; cancer; cytostatic; antilipaemic;
  hypotensive; anorectic.
  OS Mus sp.
  XX
  PN US2003064372-A1.
  XX
  PD 03-APR-2003.
  XX
  PF 07-SEP-2001; 2001US-00949428.
  XX
  PR 22-JUN-2000; 2000US-0213322P.
  XX
  PA (BODN/) BODNAR J S.
  PA (CAST/) CASTELLANI L W.
  PA (CHAT/) CHATTERJEE A.
  PA (JONG/) JONG P D.
  PA (LUSI/) LUSIS A J.
  PA (OHME/) OHMEN J.
  PA (ROSS/) ROSS D.
  PA (TAFU/) TAFURI S.
  PA (WUCC/) WU C.
  XX
  PI Bodnar JS, Castellani LW, Chatterjee A, Jong PD, Lusis AJ;
  PI Ohmen J, Ross D, Tafuri S, Wu C;
  XX
  DR WPI; 2003-540780/51.
  XX
  PT Novel isolated polynucleotide comprising a mouse or human familial
  PT combined hyperlipidemia 1 gene having a variation that is associated with
  PT a lipid disorder, useful for identifying susceptibility to the lipid
  PT disorder.
  XX
  PS Claim 11; Page 40; 63pp; English.
  XX
  CC The invention discloses isolated polynucleotides comprising mouse HYPLIPI
  CC cDNA sequence, mouse HYPLIPI1 genomic DNA, or the homologous human
  CC familial combined hyperlipidaemia 1 (FCHL1) gene, where a variation in
  CC the sequence is associated with a lipid disorder. Also claimed is an
  CC isolated polypeptide comprising a variant form of the mouse HYPLIPI1 amino
  CC acid sequence, or a variant form of a fully defined human FCHL1 amino
  CC acid sequence, where the variant is associated with the lipid disorder,
  CC an isolated polynucleotide having at least 12 contiguous nucleotides of
  CC the isolated polynucleotides, where the 12 contiguous nucleotides span
  CC the variation position, an isolated polypeptide comprising 4 contiguous
  CC amino acids of the encode polypeptides, where the 4 contiguous amino
  CC acids span the variation position, a kit for the detection of the FCHL1
  CC locus comprising, an isolated antibody, identifying susceptibility to a
  CC lipid disorder which comprises comparing the nucleotide sequence of the
  CC suspected FCHL1 allele with a wild-type FCHL1 nucleotide sequence, where
  CC the difference between the suspected allele and the wild-type sequence
  CC identifies a sequence variation of FCHL1 nucleotide sequence and a
  CC pharmaceutical composition. Also disclosed is a transgenic animal which
  CC carries an altered HYPLIPI1 or FCHL1 allele and a method for screening
  CC drugs for inhibition or restoration of FCHL1 gene function as an anti-
  CC lipid disorder or anti-cancer therapy. The polynucleotides, polypeptides
  CC and antibodies are useful for treating or preventing (e.g. gene therapy)
  CC a lipid disorder associated with expression of FCHL1, for diagnosis or
  CC prognosis of predisposition to lipid disorder, and cancer and for
  CC treating a lipid disorder such as familial combined hyperlipidaemia,

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CC coronary artery disease, atherogenic lipoprotein phenotype.  
 CC hyperapobetalipoproteinaemia, hypertriglyceridaemia, low density  
 CC lipoprotein (LDL) subclass B, familial dyslipidemic hypertension, and  
 CC syndrome X, hypercholesterolaemia, obesity, insulin resistance and  
 CC cancer. The sequence presented is a PCR primer which was used to amplify  
 CC part of the mouse HYPLIP1 locus.  
 XX  
 SQ Sequence 21 BP; 3 A; 8 C; 6 G; 4 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 13.2; DB 1; Length 21;  
 Best Local Similarity 83.3%; Pred. No. 6.2e+02;  
 Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 36 GGAGCCTCAGTCCAGAGA 53  
 DB 20 GGAGCCTGAGTCTCAGA 3  
 RESULT 365  
 ADB95955/c  
 ID ADB95955 standard; DNA; 21 BP.  
 XX  
 AC ADB95955;  
 XX  
 DT 04-DEC-2003 (first entry)  
 XX  
 DE Mouse HYPLIP1 PCR primer #333.  
 XX  
 KW cytostatic; antilipemic; gene therapy; peptide therapy; HYPLIP1; FCHLI;  
 KW cancer; metabolic pathway; cellular mechanism; lipid disorder;  
 KW familial combined hyperlipidaemia; mouse; PCR; primer; ss.  
 XX  
 OS Mus sp.  
 XX  
 PN US2003054418-A1.  
 XX  
 PD 20-MAR-2003.  
 XX  
 PF 07-SEP-2001; 2001US-00949427.  
 XX  
 PR 08-SEP-2000; 2000US-0231322P.  
 XX  
 PA (BODN/) BODNAR J S.  
 PA (CAST/) CASTELLANI L W.  
 PA (CHAT/) CHATTERJEE A.  
 PA (JONG/) JONG P D.  
 PA (LUSI/) LUSIS A J.  
 PA (OHME/) OHMEN J.  
 PA (ROSS/) ROSS D.  
 PA (TAFU/) TAFURI S.  
 PA (WUCC/) WU C.  
 XX  
 PI Bodnar JS, Castellani LW, Chatterjee A, Jong PD, Lusis AJ;  
 PI Ohmen J, Ross D, Tafuri S, Wu C;  
 DR WPI; 2003-695901/66.  
 XX  
 PT Novel human FCHLI or mouse HYPLIP1 polypeptide, useful for drug  
 PT screening, peptide therapy of lipid disorder or cancer.  
 PS  
 PS Claim 11; Page 39; 56pp; English.  
 XX  
 CC The invention describes an isolated polypeptide (I) comprising a variant  
 CC form of a mouse HYPLIP1 polypeptide sequence (S1) or a human FCHLI  
 CC polypeptide sequence (S2), not given in the specification, where the  
 CC variant form is associated with cancer, or an amino acid sequence having  
 CC at least 65 % sequence identity to (S1) or (S2). A composition comprising  
 CC DNA encoding (I) is useful for treating or preventing cancer associated  
 CC with expression of FCHLI. FCHLI gene or HYPLIP1 gene and its product are  
 CC useful for the study of metabolic pathway and cellular mechanism to  
 CC identify other genes, receptors and relationships that contribute to  
 CC lipid disorder and cancer. FCHLI gene or its fragments are useful in gene  
 CC therapy to increase the amount of the expression products of the gene for

CC the treatment of lipid disorder or cancerous cells. The sequence  
 CC variation of FCHLI gene or HYPLIP1 gene is also useful in the diagnosis  
 CC and prognosis of predisposition to lipid disorder and cancer. Antisense  
 CC polynucleotide sequences are useful in preventing or diminishing the  
 CC expression of HYPLIP1 or FCHLI locus. This sequence represents a primer  
 CC used in the analysis of the mouse HYPLIP1 gene.  
 XX  
 SQ Sequence 21 BP; 3 A; 8 C; 6 G; 4 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 13.2; DB 1; Length 21;  
 Best Local Similarity 83.3%; Pred. No. 6.2e+02;  
 Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 36 GGAGCCTCAGTCCAGAGA 53  
 DB 20 GGAGCCTGAGTCTCAGA 3  
 RESULT 366  
 ABH07885/c  
 ID ABH07885 standard; DNA; 13 BP.  
 XX  
 AC ABH07885;  
 XX  
 DT 22-FEB-2002 (first entry)  
 XX  
 DE Oligonucleotide SEQ ID NO 207862 for detecting SNP TSC0050831.  
 XX  
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200177384-A2.  
 XX  
 PD 18-OCT-2001.  
 XX  
 PF 06-APR-2001; 2001WO-IB000713.  
 XX  
 PR 07-APR-2000; 2000DE-01019173.  
 XX  
 PA (EPIG-) EPIGENOMICS AG.  
 XX  
 PI Olek A, Piepenbrock C, Berlin K;  
 XX  
 DR WPI; 2001-657177/75.  
 XX  
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX  
 PS Claim 1; SEQ ID NO 207862; 29pp + Sequence Listing; German.  
 XX  
 CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 13 BP; 6 A; 5 C; 0 G; 2 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 13; DB 1; Length 13;  
 Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;





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XX 07-APR-2000; 2000DE-01019173.
XX (EPIC-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 207861; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC9989, ABR00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 2 A; 0 C; 5 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 13; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 1.6e+02;
XX Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 992 TTGTTTGTGGGAA 1004
XX 1 TTGTTTGTGGGAA 13
XX
XX RESULT 370
XX AAQ38798/C
XX ID AAQ38798 standard; DNA; 15 BP.
XX
XX AAQ38798;
XX
XX 25-MAR-2003 (revised)
XX 26-JUN-1993 (first entry)
XX
XX PCR primer #12 for analysis of lower TCR Vbeta gene usage in RA SLLs.
XX
XX TCR; T cell receptor; autoimmune disease; rheumatoid arthritis; RA;
XX J beta domain; V beta domain; T-cell mediated autoimmune disease;
XX antagonists.
XX
XX Homo sapiens.
XX
XX OS
XX
XX WO9306135-A1.
XX
XX 01-APR-1993.
XX
XX 23-SEP-1992; 92WO-US008094.
XX
XX 23-SEP-1991; 91US-00765222.
XX
XX 18-OCT-1991; 91US-00779445.
XX
XX 18-MAR-1992; 92US-00853362.
XX
XX (GETH ) GENENTECH INC.
XX
XX Amento EP;
XX
XX WPI; 1993-117475/14.
XX
XX T-cell receptor antagonising polypeptide(s) - used in the diagnosis and

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PT treatment of auto-immune disorders, partic. rheumatoid arthritis.
XX
XX Example 1; Page 22; 51pp; English.
XX
XX This 5' PCR primer was used with a 3' primer designated a constant region
XX sequence common to all TCR beta transcripts. It was used for the PCR
XX analysis of lower TCR usage in synovial Vbetas. This primer was used for
XX Vbeta family 9, subfamily 9.1, Jbeta 2.3, Cbeta 2 and corresponds to D &
XX J translation AAR34166. (Updated on 25-MAR-2003 to correct PN field.)
XX
XX Sequence 15 BP; 2 A; 5 C; 7 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 13; DB 1; Length 15;
XX Best Local Similarity 100.0%; Pred. No. 2.5e+02;
XX Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 1096 CCCACCCCTGGGCT 1108
XX 14 CCCACCCCTGGGCT 2
XX
XX RESULT 371
XX AAX65124/C
XX ID AAX65124 standard; RNA; 15 BP.
XX
XX AAX65124;
XX
XX 20-JUL-1999 (first entry)
XX
XX Mouse B7-1 hammerhead ribozyme target SEQ ID NO:1756.
XX
XX Arthritic condition; graft tolerance; immune response; target; cleavage;
XX hammerhead ribozyme; hairpin ribozyme; human; rabbit; mouse; collagenase;
XX stromelysin; synovial membrane; joint; arthritis; osteoarthritis;
XX rheumatoid arthritis; autoimmune disease; allergy; inflammation;
XX diagnosis; ss.
XX
XX Mus sp.
XX
XX WO9618736-A2.
XX
XX 20-JUN-1996.
XX
XX 22-NOV-1995; 95WO-US015516.
XX
XX 13-DEC-1994; 94US-00354920.
XX
XX 23-DEC-1994; 94US-00363253.
XX
XX 23-DEC-1994; 94US-00363254.
XX
XX 17-FEB-1995; 95US-00390850.
XX
XX 20-APR-1995; 95US-00426124.
XX
XX 02-MAY-1995; 95US-00432874.
XX
XX 04-MAY-1995; 95US-00434509.
XX
XX 07-JUL-1995; 95US-0000951P.
XX
XX 07-JUL-1995; 95US-0000974P.
XX
XX 07-AUG-1995; 95US-00512861.
XX
XX 05-OCT-1995; 95US-00541365.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Beigelman L, Stinchcomb DT, Jarvis T, Draper K, Pavco P;
XX Mcswiggen J, Gustofson J, Usman N, Wincott F, Matulic-Adamic J;
XX Karpeisky A, Thompson JD, Modak A, Burgin A;
XX
XX WPI; 1996-300653/30.
XX
XX Enzymatic nucleic acid molecules having a hammer-head motif - used for
XX the treatment of arthritis, induction of graft tolerance or treatment of
XX auto-immune diseases.
XX
XX Claim 10; Page 177; 307pp; English.
XX
XX The present invention describes a novel enzymatic nucleic acid (ENA)
XX having a hammerhead motif (HM) comprising: (i) at least 5 ribose residues

```

CC ; (ii) a 2'-C-allyl modification at position 4 of the ENA; (iii) at least  
 CC ten 2'-O-methyl modifications; and (iv) a 3'-end modification. The ENA's  
 CC can inhibit collagenase and stromelysin production in the synovial  
 CC membrane of joints for the treatment or prevention of arthritis,  
 CC particularly osteoarthritis or rheumatoid arthritis. The ENA's can also  
 CC be used to treat antigen presenting cells of a donor to induce tolerance  
 CC in a recipient to an alloantigen of a donor. They can also be used for  
 CC enhancing graft tolerance or for treating autoimmune disease, and for  
 CC treating allergies and other inflammatory conditions. The ENA's can also  
 CC be used in diagnosis. Ribozyme therapy impacts on the expression of  
 CC stromelysin without introducing the non-specific effects upon gene  
 CC expression which accompany treatment with retinoids and dexamethasone.  
 CC The concentration of ribozyme required to affect a therapeutic treatment  
 CC is lower than that required of antisense molecules, and is highly  
 CC specific. The present sequence is used in the exemplification of the  
 CC present invention  
 XX  
 SQ Sequence 15 BP; 1 A; 3 C; 3 G; 0 T; 8 U; 0 Other;

Query Match 0.6%; Score 13; DB 1; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 2.5e+02;  
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1011 ACCTGAAAAAGAG 1023  
 DB |||||  
 13 ACCTGAAAAAGAG 1

RESULT 372  
 AAX65122/c  
 ID AAX65122 standard; RNA; 15 BP.  
 XX  
 AC AAX65122;  
 XX  
 DT 20-JUL-1999 (first entry)  
 XX  
 DE Mouse B7-1 hammerhead ribozyme target SEQ ID NO:1754.  
 XX  
 KW Arthritic condition; graft tolerance; immune response; target; cleavage;  
 KW hammerhead ribozyme; hairpin ribozyme; human; rabbit; mouse; collagenase;  
 KW stromelysin; synovial membrane; joint; arthritis; osteoarthritis;  
 KW rheumatoid arthritis; autoimmune disease; allergy; inflammation;  
 KW diagnosis; ss.  
 XX

OS Mus sp.  
 XX  
 PN WO9618736-A2.  
 XX  
 PD 20-JUN-1996.  
 XX  
 PF 22-NOV-1995; 95WO-US015516.  
 XX  
 PR 13-DEC-1994; 94US-00354920.  
 PR 23-DEC-1994; 94US-00363253.  
 PR 23-DEC-1994; 94US-00363254.  
 PR 17-FEB-1995; 95US-00390850.  
 PR 20-APR-1995; 95US-00426124.  
 PR 02-MAY-1995; 95US-00432874.  
 PR 04-MAY-1995; 95US-00434509.  
 PR 07-JUL-1995; 95US-0000951P.  
 PR 07-JUL-1995; 95US-0000974P.  
 PR 07-AUG-1995; 95US-00512861.  
 PR 05-OCT-1995; 95US-00541365.  
 XX

(RIBO-) RIBOZYME PHARM INC.  
 XX  
 XX Beigelman L, Stinchcomb DT, Jarvis T, Draper K, Pavco P;  
 PI McSwiggan J, Gustofsen J, Usman N, Wincott F, Matulic-Adamic J;  
 PI Karpeisky A, Thompson JD, Modak A, Burgin A;  
 XX WPI; 1996-300653/30.  
 DR

XX Enzymatic nucleic acid molecules having a hammer-head motif - used for

PT the treatment of arthritis, induction of graft tolerance or treatment of  
 PT auto-immune diseases.

PS Claim 10; Page 177; 307pp; English.

XX The present invention describes a novel enzymatic nucleic acid (ENA)  
 CC having a hammerhead motif (HM) comprising: (i) at least 5 ribose residues  
 CC ; (ii) a 2'-C-allyl modification at position 4 of the ENA; (iii) at least  
 CC ten 2'-O-methyl modifications; and (iv) a 3'-end modification. The ENA's  
 CC can inhibit collagenase and stromelysin production in the synovial  
 CC membrane of joints for the treatment or prevention of arthritis,  
 CC particularly osteoarthritis or rheumatoid arthritis. The ENA's can also  
 CC be used to treat antigen presenting cells of a donor to induce tolerance  
 CC in a recipient to an alloantigen of a donor. They can also be used for  
 CC enhancing graft tolerance or for treating autoimmune disease, and for  
 CC treating allergies and other inflammatory conditions. The ENA's can also  
 CC be used in diagnosis. Ribozyme therapy impacts on the expression of  
 CC stromelysin without introducing the non-specific effects upon gene  
 CC expression which accompany treatment with retinoids and dexamethasone.  
 CC The concentration of ribozyme required to affect a therapeutic treatment  
 CC is lower than that required of antisense molecules, and is highly  
 CC specific. The present sequence is used in the exemplification of the  
 CC present invention  
 XX

SQ Sequence 15 BP; 1 A; 3 C; 2 G; 0 T; 9 U; 0 Other;

Query Match 0.6%; Score 13; DB 1; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 2.5e+02;  
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1011 ACCTGAAAAAGAG 1023  
 DB |||||  
 14 ACCTGAAAAAGAG 2

RESULT 373  
 AAX65123/c  
 ID AAX65123 standard; RNA; 15 BP.  
 XX  
 AC AAX65123;  
 XX

DT 20-JUL-1999 (first entry)

XX Mouse B7-1 hammerhead ribozyme target SEQ ID NO:1755.

XX Arthritic condition; graft tolerance; immune response; target; cleavage;  
 KW hammerhead ribozyme; hairpin ribozyme; human; rabbit; mouse; collagenase;  
 KW stromelysin; synovial membrane; joint; arthritis; osteoarthritis;  
 KW rheumatoid arthritis; autoimmune disease; allergy; inflammation;  
 KW diagnosis; ss.  
 XX

OS Mus sp.

XX WO9618736-A2.

XX 20-JUN-1996.

XX 22-NOV-1995; 95WO-US015516.

XX 13-DEC-1994; 94US-00354920.

XX 23-DEC-1994; 94US-00363253.

XX 23-DEC-1994; 94US-00363254.

XX 17-FEB-1995; 95US-00390850.

XX 20-APR-1995; 95US-00426124.

XX 02-MAY-1995; 95US-00432874.

XX 04-MAY-1995; 95US-00434509.

XX 07-JUL-1995; 95US-0000951P.

XX 07-JUL-1995; 95US-0000974P.

XX 07-AUG-1995; 95US-00512861.

XX 05-OCT-1995; 95US-00541365.

XX (RIBO-) RIBOZYME PHARM INC.

PI Beigelman L, Stinchcomb DT, Jarvis T, Draper K, Pavco P;  
 PI McSwiggen J, Gustofson J, Usman N, Wincott F, Matulic-Adamic J;  
 PI Karpeisky A, Thompson JD, Modak A, Burgin A;  
 XX WPI: 1996-300653/30.  
 XX  
 XX Enzymatic nucleic acid molecules having a hammer-head motif - used for  
 PT the treatment of arthritis, induction of graft tolerance or treatment of  
 PT auto-immune diseases.  
 XX  
 XX Claim 10; Page 177; 307pp; English.  
 XX  
 CC The present invention describes a novel enzymatic nucleic acid (ENA)  
 CC having a hammerhead motif (HM) comprising: (i) at least 5 ribose residues  
 CC ; (ii) a 2'-C-allyl modification at position 4 of the ENA; (iii) at least  
 CC ten 2'-O-methyl modifications; and (iv) a 3'-end modification. The ENA's  
 CC can inhibit collagenase and stromelysin production in the synovial  
 CC membrane of joints for the treatment or prevention of arthritis,  
 CC particularly osteoarthritis or rheumatoid arthritis. The ENA's can also  
 CC be used to treat antigen presenting cells of a donor to induce tolerance  
 CC in a recipient to an alloantigen of a donor. They can also be used for  
 CC enhancing graft tolerance or for treating autoimmune disease, and for  
 CC treating allergies and other inflammatory conditions. The ENA's can also  
 CC be used in diagnosis. Ribozyme therapy impacts on the expression of  
 CC stromelysin without introducing the non-specific effects upon gene  
 CC expression which accompany treatment with retinoids and dexamethasone.  
 CC The concentration of ribozyme required to affect a therapeutic treatment  
 CC is lower than that required of antisense molecules, and is highly  
 CC specific. The present sequence is used in the exemplification of the  
 CC present invention  
 XX  
 SQ Sequence 15 BP; 1 A; 3 C; 3 G; 0 T; 8 U; 0 Other;

Query Match 0.6%; Score 13; DB 1; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 2.5e+02;  
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1011 ACCTGAAAAAGAG 1023  
 DB 13 ACCTGAAAAAGAG 1

RESULT 374  
 AAF47944  
 ID AAF47944 standard; DNA; 15 BP.  
 XX  
 AC AAF47944;  
 XX  
 DT 30-MAR-2001 (first entry)  
 XX  
 DE IGFBP3 oligonucleotide #1364.

XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;  
 KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
 KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;  
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;  
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
 KW hyperneovascular condition; hyperplasia; kidney disease;  
 KW neovascular condition of the retina; ss.

XX Homo sapiens.  
 XX WO200078341-A1.  
 XX  
 XX 28-DEC-2000.  
 XX  
 XX 21-JUN-2000; 2000WO-AU000693.  
 XX  
 XX 21-JUN-1999; 99US-0140345P.  
 XX  
 XX (MURD-) MURDOCH CHILDRENS RES INST.

PI Wright CJ, Werther GA, Edmondson SR;  
 XX WPI: 2001-041421/05.  
 XX  
 XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering  
 PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that  
 PT inhibits or reduces growth factor mediated cell proliferation and/or  
 PT inflammation.  
 XX  
 XX Example 7; Page 53; 201pp; English.

XX The present invention relates to a method for ameliorating the effects of  
 CC skin disorders. The method comprises contacting the skin with an  
 CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1  
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of  
 CC inhibiting or reducing growth factor mediated cell proliferation,  
 CC inflammation and/or other disorders. The present sequence is an  
 CC oligonucleotide which can be used to design the antisense  
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-  
 CC F45161). The method is useful for ameliorating the effects of psoriasis,  
 CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,  
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a  
 CC hyperneovascular condition such as a neovascular condition of the retina,  
 CC brain or skin, growth factor-mediated malignancies, other sclerotic  
 CC disease, kidney disease, hyperproliferation of the inside of blood  
 CC vessels or any other hyperplasia  
 XX  
 SQ Sequence 15 BP; 2 A; 9 C; 1 G; 3 T; 0 U; 0 Other;

Query Match 0.6%; Score 13; DB 1; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 2.5e+02;  
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1088 GCTTCACCCCCAC 1100  
 DB 2 GCTTCACCCCCAC 14

RESULT 375  
 AAT81536/c  
 ID AAT81536 standard; RNA; 17 BP.

XX AAT81536;  
 XX  
 DT 14-DEC-1997 (first entry)  
 XX  
 DE Human c-myb hammerhead ribozyme target sequence (nt. position 2822).  
 XX  
 KW Enzymatic nucleic acid; hammerhead; ribozyme; cleavage; human;  
 KW smooth muscle cell; hyperproliferation; restenosis; cancer; c-myb;  
 KW coronary angioplasty; ss.

XX Homo sapiens.  
 XX WO9531541-A2.  
 XX  
 XX 23-NOV-1995.  
 XX  
 XX 18-MAY-1995; 95WO-US006368.  
 XX  
 XX 18-MAY-1994; 94US-00245466.  
 XX 13-JAN-1995; 95US-00373124.  
 XX  
 XX (RIBO-) RIBOZYME PHARM INC.

XX Stinchcomb DT, Draper K, McSwiggen J, Jarvis T;  
 XX WPI: 1996-010927/01.

XX New enzymatic nucleic acid molecules - cleave RNA produced by e.g. c-myb,  
 PT for treating restenosis or cancer.  
 XX  
 XX Claim 1; Page 77; 128pp; English.

XX The present sequence represents the preferred target sequence for an  
 CC enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves  
 CC the human c-myc sequence at the base position indicated in the descriptor  
 CC line. The c-myc sequence was screened for optimal ribozyme target sites  
 CC using a computer folding algorithm, and regions of the mRNA which did not  
 CC form secondary folding structures and contained potential ribozyme  
 CC cleavage sites were identified. Ribozymes were synthesized and their  
 CC activities optimised by either varying the length of the binding arms or  
 CC by modification to prevent degradation by nucleases. The ribozymes cleave  
 CC the c-myc sequence and can be used to prevent smooth muscle cell  
 CC hyperproliferation in restenosis, especially after coronary angioplasty,  
 CC and in cancers  
 XX  
 SQ Sequence 17 BP; 6 A; 2 C; 6 G; 0 T; 3 U; 0 Other;  
 Query Match 0.6%; Score 13; DB 1; Length 17;  
 Best Local Similarity 100.0%; Pred. No. 3.7e+02;  
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 975 GTCCAGGCTCTAC 987  
 DB 13 GTCCAGGCTCTAC 1  
 RESULT 376  
 ABL45035/c  
 ID ABL45035 standard; RNA; 17 BP.  
 XX  
 AC ABL45035;  
 XX  
 DT 12-MAR-2002 (first entry)  
 XX  
 DE Human NOGO Amberzyme #50.  
 XX  
 KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;  
 KW cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;  
 KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;  
 KW DNzyme; inozyme; G-cleaver; amberzyme; zinczyme; lymphoma; leukaemia;  
 KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;  
 KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;  
 KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;  
 KW inflammatory arthropathy; central nervous system injury;  
 KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;  
 KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;  
 KW Parkinson's disease; ataxia; Huntington's disease;  
 KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.  
 XX  
 OS Homo sapiens.  
 OS Synthetic.  
 XX  
 PN WO200159103-A2.  
 XX  
 PD 16-AUG-2001.  
 XX  
 PF 09-FEB-2001; 2001WO-US004273.  
 XX  
 PR 11-FEB-2000; 2000US-0181797P.  
 PR 28-FEB-2000; 2000US-0185516P.  
 PR 06-MAR-2000; 2000US-0187128P.  
 XX  
 XX (RIBO-) RIBOZYME PHARM INC.  
 PA (BLAT/) BLATT L.  
 PA (MCSW/) MCSWIGGEN J.  
 PA (CHOW/) CHOWRIRA B M.  
 XX  
 PI Blatt L, Mcswiggen J, Chowrira EM;  
 XX WPI; 2001-607195/69.  
 DR  
 XX Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense  
 PT constructs, which down regulate expression of a CD20 gene or neurite  
 PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and

PT central nervous system injury.  
 XX  
 PS Claim 88; Page 131; 200pp; English.  
 XX  
 CC The invention relates to a nucleic acid molecule which down regulates  
 CC expression of a CD20 gene and a nucleic acid molecule which down  
 CC regulates expression of a neurite growth inhibitor gene (NOGO). The  
 CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a  
 CC DNzyme) an inozyme (an endolytic nucleic acid cleaving a an RNA molecule  
 CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) pr  
 CC an amberzyme (cleaving RNA with an NGN triplet), a zinczyme (cleaving RNA  
 CC with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA  
 CC of CD20 in the presence of a divalent cation that is preferably Mg<sup>2+</sup>.  
 CC Furthermore, it may be contacted with a cell to reduce CD20 activity of  
 CC the cell and treat a patient having a condition associated with the level  
 CC of CD20. The treatment may further comprise the use of one or more  
 CC therapies. In particular, the CD20 targeting nucleic acid may be used to  
 CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-  
 CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic  
 CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell  
 CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,  
 CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-  
 CC targeting nucleic acid is used to cleave RNA of the NOGO gene in the  
 CC presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, the  
 CC nucleic acid may be contacted with a cell to reduce NOGO activity of the  
 CC cell and treat a patient having a condition associated with the level of  
 CC NOGO. The treatment may further comprise the use of one or more  
 CC therapies. In particular, the NOGO-targeting nucleic acid may be used to  
 CC treat central nervous system (CNS) injury and cerebrovascular accident  
 CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),  
 CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),  
 CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob  
 CC disease, muscular dystrophy, and/or other neurodegenerative disease  
 CC states which respond to the modulation of NOGO expression. The present  
 CC sequence is an amberzyme molecule of the invention  
 XX  
 SQ Sequence 17 BP; 3 A; 2 C; 9 G; 0 T; 3 U; 0 Other;  
 Query Match 0.6%; Score 13; DB 1; Length 17;  
 Best Local Similarity 100.0%; Pred. No. 3.7e+02;  
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1134 CACCTCCAGCTCC 1146  
 DB 14 CACCTCCAGCTCC 2  
 RESULT 377  
 ABL45035  
 ID ABL45035 standard; DNA; 17 BP.  
 XX  
 AC ABL45035;  
 XX  
 DT 11-APR-2002 (first entry)  
 XX  
 DE Human chromosome 1p36-35 PCR primer SEQ ID NO:2079.  
 XX  
 KW Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;  
 KW PCR primer; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN JP2001321190-A.  
 XX  
 PD 20-NOV-2001.  
 XX  
 PF 12-MAR-2001; 2001JP-00068285.  
 XX  
 PR 10-MAR-2000; 2000JP-00066716.  
 XX  
 PA (RIKA) RIKAGAKU KENKYUSHO.  
 XX (GENO-) GENOTEX YG.  
 XX

DR WPI; 2002-144136/19.  
 XX  
 PT Arraying genome clones.  
 XX  
 PS  
 XX  
 XX Claim 4; Page 45; 528pp; Japanese.  
 CC  
 CC The present invention describes a method of arraying genome clones. The method comprises: (a) clones of the genomic libraries contained in multiwell plates numbered for discrimination are mixed in each of the multiwell plates; (b) a primer designed based on the chromosome marker sequence is added to the mixture to carry out an amplification reaction; (c) a signal corresponding to the marker is detected from the resultant amplified product to specify the discrimination Nos. of the multiwell plates containing the clones having said marker sequence; (d) the order of the markers is changed so that the same discrimination Nos. succeed to the maximum in the specified discrimination Nos. to array the multiwell plates; (e) the clones in the multiwell plates of the specified discrimination Nos. are mixed respectively in each wells of longitudinal and lateral directions; (f) the mixed clones are cultured and the resultant cultures are amplified by using the above primer; (g) signals are detected from the amplified products; (h) the clones in the multiwell plates are specified from the detected result; and (i) the clones are reconstituted as the positions on the chromosome and arrayed. The microarray is useful for gene analysis. ABL42957 to ABL45322 represent PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634 represent PCR primers for human chromosome 21q22.1, which are specifically claimed for use in the present invention  
 XX  
 XX  
 SQ Sequence 17 BP; 3 A; 7 C; 3 G; 4 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 13; DB 1; Length 17;  
 Best Local Similarity 100.0%; Pred. No. 3.7e+02;  
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1043 CTACTAGCCCT 1055  
 Db 5 CTACTAGCCCT 17  
 RESULT 378  
 ADB42940  
 ID ADB42940 standard; DNA; 17 BP.  
 XX  
 AC ADB42940;  
 XX  
 DT 18-DEC-2003 (revised)  
 DT 04-DEC-2003 (first entry)  
 XX  
 XX Tumour suppression/reversion associated nucleotide #3263.  
 XX cytostatic; antiviral; neuroprotective; nontropic; neuroleptic; ss;  
 KW primer; probe; tumour suppression; tumour reversion; apoptosis;  
 KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;  
 KW diagnosis.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2003040369-A2.  
 XX  
 XX 15-MAY-2003.  
 XX  
 XX 17-SEP-2002; 2002WO-IB004219.  
 XX  
 XX 17-SEP-2001; 2001FR-00011981.  
 XX  
 XX (MOLE-) MOLECULAR ENGINES LAB.  
 XX  
 XX Telerman A, Amson R, Tuljinder M;  
 XX  
 XX WPI; 2003-441574/41.  
 DR  
 XX New nucleic acid encoding human prostate membrane-specific antigen,  
 PT useful e.g. for treatment of tumors and viral infection, also related

PT polypeptide and antibodies.  
 XX  
 PS Disclosure; Page 413; 771pp; French.  
 XX  
 CC The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the nucleotides. The nucleotides are used as probes or primers for detecting, identifying, quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and cells containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours or cell degeneration (e.g. Alzheimer's disease or schizophrenia). CC Analysis of the expression of the nucleotides can be used for diagnosis and/or prognosis of these diseases. The nucleotides and polypeptides can also be used to screen for their specific interactive molecules, CC potentially useful for treating diseases associated with abnormal expression of the nucleotides.  
 XX  
 SQ Sequence 17 BP; 2 A; 4 C; 2 G; 9 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 13; DB 1; Length 17;  
 Best Local Similarity 100.0%; Pred. No. 3.7e+02;  
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 919 CTTTGCCCTTTAT 931  
 Db 5 CTTTGCCCTTTAT 17  
 RESULT 379  
 ADE48000  
 ID ADE48000 standard; DNA; 17 BP.  
 XX  
 AC ADE48000;  
 XX  
 DT 29-JAN-2004 (first entry)  
 DT  
 XX Human NOVX reverse PCR primer SEQ ID NO:362.  
 DE  
 XX human; cardiac; antiarteriosclerotic; hypotensive; immunosuppressive;  
 KW dermatological; anorectic; cytostatic; antidiabetic; haemostatic;  
 KW anti-HIV; antiasthmatic; antibacterial; virucide; neuroprotective;  
 KW nontropic; antiparkinsonian; antilipemic; gene therapy; vaccine; PCR;  
 KW primer; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2003076642-A2.  
 XX  
 XX 18-SEP-2003.  
 XX  
 XX 02-AUG-2002; 2002WO-US024459.  
 XX  
 XX 02-AUG-2001; 2001US-0309501P.  
 PR 03-AUG-2001; 2001US-0310291P.  
 PR 08-AUG-2001; 2001US-0310951P.  
 PR 09-AUG-2001; 2001US-0311292P.  
 PR 13-AUG-2001; 2001US-0311979P.  
 PR 14-AUG-2001; 2001US-0312203P.  
 PR 17-AUG-2001; 2001US-0313156P.  
 PR 17-AUG-2001; 2001US-0313201P.  
 PR 20-AUG-2001; 2001US-0313702P.  
 PR 21-AUG-2001; 2001US-0314031P.  
 PR 23-AUG-2001; 2001US-0314466P.  
 PR 28-AUG-2001; 2001US-0315403P.  
 PR 29-AUG-2001; 2001US-0315853P.

PR 31-AUG-2001; 2001US-0316508P.  
 PR 21-SEP-2001; 2001US-0323936P.  
 PR 03-DEC-2001; 2001US-0338078P.  
 PR 05-FEB-2002; 2002US-0354655P.  
 PR 05-MAR-2002; 2002US-0361764P.  
 PR 19-APR-2002; 2002US-0373825P.  
 PR 15-MAY-2002; 2002US-0380971P.  
 PR 15-MAY-2002; 2002US-0380980P.  
 PR 16-MAY-2002; 2002US-0381039P.  
 PR 28-MAY-2002; 2002US-0383761P.  
 PR 29-MAY-2002; 2002US-0383887P.  
 PR 01-AUG-2002; 2002US-00210130.  
 XX (CURA-) CURAGEN CORP.  
 XX Zerhusen BD, Patturajan M, Kekuda R, Miller CE, Rieger DK;  
 PI Pena CE, Shinkets RA, Li L, Berghs C, Zhong M, Casman SJ, Voss EZ;  
 PI Boldog FL, Padigaru M, Smithson G, Shenoy SG, Ji W, Gorman L;  
 PI Vernet CAM, Leite MW, Guo X, Anderson DW, Spytek KA, Gerlach VL;  
 PI Burgess CE, Khrantsov NV, Ort T, Ellerman K, Rastelli L, Agee ML;  
 PI Chaudhuri A, Chant JS, Dipippo VA, Edinger SR, Eisen A, Gangolli EA;  
 PI Giot L, Ooi CE, Rothenberg ME, Spaderna SK, Hjalt T, Liu X;  
 PI Taupier RJ, Catterton E;  
 XX WPI; 2003-779062/73.  
 DR New NOVX polypeptides and nucleic acids, useful for preventing or  
 XX treating NOVX-associated disorders, e.g. cancer, diabetes,  
 PT atherosclerosis, asthma or AIDS, and in chromosome mapping, tissue typing  
 PT or pharmacogenomics.  
 PT  
 PS Example 49; SEQ ID NO 362; 562pp; English.  
 XX  
 CC The invention relates to a novel (NOVX) human polypeptide. A polypeptide  
 CC of the invention has cardiac, antiarteriosclerotic, hypotensive, and  
 CC immunosuppressive, dermatological, anorectic, cytostatic, antidiabetic,  
 CC haemostatic, anti-HIV, antialthmatic, antibacterial, virucide,  
 CC neuroprotective, neurotropic, antiparkinsonian, and antilipemic activity.  
 CC A polynucleotide encoding a polypeptide of the invention may have a use  
 CC in gene therapy, and as a vaccine. A polypeptide of the invention is  
 CC useful in the manufacture of a medicament for treating a syndrome  
 CC associated with a human disease, the disease selected from a pathology  
 CC associated with the polypeptide. These may also be used in diagnosing,  
 CC treating or preventing NOVX-associated disorders such as cardiomyopathy,  
 CC atherosclerosis, hypertension, scleroderma, obesity, cancer, diabetes,  
 CC haemophilia, graft-versus-host disease, AIDS, asthma, Crohn's disease,  
 CC multiple sclerosis, infections, anorexia, cancer-associated cachexia,  
 CC neurodegenerative disorders (e.g. Alzheimer's disease or Parkinson's  
 CC disease), haematopoietic disorders, dyslipidaemias and other wasting  
 CC disorders associated with chronic diseases. The nucleic acids are also  
 CC used as hybridisation probes, in chromosome mapping, tissue typing,  
 CC preventive medicine, and pharmacogenomics. The polypeptides are also  
 CC useful as vaccines. The present sequence represents a PCR primer used in  
 CC the invention.  
 XX  
 SQ Sequence 17 BP; 2 A; 9 C; 3 G; 3 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 13; DB 1; Length 17;  
 Best Local Similarity 100.0%; Pred. No. 3.7e+02;  
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1134 CACCTCCAGCTCC 1146  
 Db |||||  
 2 CACCTCCAGCTCC 14  
 RESULT 380  
 AAD15702  
 ID AAD15702 standard; DNA; 18 BP.  
 XX  
 AC AAD15702;  
 XX  
 DT 15-NOV-2001 (first entry)

XX PCR primer #20, used to amplify equine influenza viral genome.  
 DE  
 XX Equine influenza virus; cold adaptation; temperature sensitivity;  
 KW vaccine; PCR primer; ss.  
 XX  
 OS Unidentified.  
 XX  
 XX WO200160849-A2.  
 XX  
 PD 23-AUG-2001.  
 XX  
 PF 16-FEB-2001; 2001WO-US005048.  
 XX  
 PR 16-FEB-2000; 2000US-00506286.  
 XX  
 PA (UYPI-) UNIV PITTSBURGH.  
 XX  
 PI Dowling PW, Youngner JS;  
 XX  
 DR WPI; 2001-522584/57.  
 XX  
 PT Novel isolated equine influenza virus (wild-type and cold-adapted)  
 PT proteins and viruses containing nucleic acid molecules encoding the  
 PT proteins, which are useful for protecting animals from influenza virus  
 PT infections.  
 XX  
 PS Disclosure; Page 120; 172pp; English.  
 XX  
 CC The patent discloses cold-adapted equine influenza viruses and  
 CC reassortant influenza A viruses comprising at least one genome segment of  
 CC such an equine influenza virus, wherein the equine influenza virus genome  
 CC segment confers at least one identifying phenotype of the cold-adapted  
 CC equine influenza virus, such as cold adaptation, temperature sensitivity,  
 CC dominant interference or attenuation. The viruses are useful for  
 CC protecting animals from diseases caused by influenza viruses. They are  
 CC also used as vaccines. The present sequence is a PCR primer which is used  
 CC to amplify equine influenza viral genome  
 XX  
 SQ Sequence 18 BP; 4 A; 5 C; 5 G; 4 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 13; DB 1; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 4.4e+02;  
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 868 ACTGAGGAGCTCAG 880  
 Db |||||  
 2 ACTGAGGAGCTCAG 14  
 RESULT 381  
 ABT05119/c  
 ID ABT05119 standard; DNA; 18 BP.  
 XX  
 AC ABT05119;  
 XX  
 DT 11-OCT-2002 (first entry)  
 XX  
 DE TNFRI expression modulation related antisense oligo SEQ ID No 149.  
 XX  
 KW Antisense compound; tumour necrosis factor receptor 1; liver disease;  
 KW TNFRI; hepatitis; liver injury; hyperproliferative disorder; cancer;  
 KW human; ds.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO200248168-AL.  
 PN  
 XX 20-JUN-2002.  
 PD  
 XX  
 PF 22-OCT-2001; 2001WO-US051224.  
 XX  
 PR 24-OCT-2000; 2000US-00695451.

XX (ISIS-) ISIS PHARM INC.  
 XX Baker BF, Cowser LM, Zhang H, Dean NM;  
 XX WPI; 2002-583481/62.  
 XX  
 XX Novel antisense compound targeted to nucleic acid molecule encoding tumor  
 XX necrosis factor receptor 1 (TNFR1), useful for treating humans having  
 XX disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.  
 XX Example 18; Page 56; 121pp; English.  
 XX  
 XX The invention relates to an antisense compound 8 to 30 nucleotides in  
 XX length targeted to nucleic acid molecule encoding tumour necrosis factor  
 XX receptor 1 (TNFR1), where the antisense compound inhibits expression of  
 XX TNFR1. The antisense compound is useful for inhibiting the expression of  
 XX TNFR1 in cells or tissues. The antisense compound is also useful for  
 XX treating an animal (preferably human) having a disease or condition  
 XX associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver  
 XX injury) or a hyperproliferative disorder such as cancer, by inhibiting  
 XX the expression of TNFR1. The antisense compound is useful for  
 XX diagnostics, therapeutics, prophylaxis and as research reagents and kits.  
 XX This polynucleotide sequence represents a human oligonucleotide relating  
 XX to the TNFR1 of the invention  
 XX  
 XX Sequence 18 BP; 4 A; 2 C; 9 G; 3 T; 0 U; 0 Other;  
 SQ

Query Match 0.6%; Score 13; DB 1; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 4.4e+02;  
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1130 CCTTCACCTCCAG 1142  
 |||||  
 DB 13 CCTTCACCTCCAG 1

RESULT 382  
 AAV55813/c  
 ID AAV55813 standard; DNA; 24 BP.  
 XX  
 XX AAV55813;  
 AC  
 XX  
 XX 27-AUG-2003 (revised)  
 DT 18-NOV-1998 (first entry)  
 DT  
 XX  
 XX Multimerisation of minimal motifs using primer ZGA2.  
 XX  
 XX Fusion protein; stabilising polypeptide; proteolytic degradation;  
 XX resistance; half-life; autoimmune disease; inflammation; nitro drug;  
 XX IkappaB regulator protein; inflammatory bowel disease; in vivo imaging;  
 XX nitroreductase protein; enzyme therapy; prodrug therapy; protease;  
 XX cancer; pathological condition; minimal motif; PCR primer; ss.  
 XX  
 XX Synthetic.  
 OS  
 OS Human herpesvirus 4.  
 XX  
 XX WO9822577-A1.  
 XX  
 XX 28-MAY-1998.  
 PD  
 XX  
 XX 17-NOV-1997; 97WO-IB001508.  
 XX  
 XX 15-NOV-1996; 96US-0030986P.  
 PR  
 XX 25-JUN-1997; 97US-0048945P.  
 PR  
 XX (MASU/) MASUCCI M G.  
 PA  
 XX  
 XX Masucci MG;  
 PI  
 XX  
 XX WPI; 1998-312463/27.  
 DR  
 XX  
 XX New fusion proteins resistant to proteolytic degradation - comprising a

PT core protein with a stabilising polypeptide comprising a peptide sequence  
 PT containing glycine repeats.  
 XX  
 XX Disclosure; Page 72; 120pp; English.  
 XX  
 XX Sequences shown in AAV55812 to AAV55827 represent primers used in the  
 XX course of the invention for the multimerisation of minimal motifs. The  
 XX invention provides a method for increasing the resistance of a core  
 XX protein to proteolytic degradation that comprises linking or inserting  
 XX onto or into the core protein a stabilising polypeptide of formula  
 XX [(Glya)(Glyb)(Glyc)Z]n where Glya, Glyb, Glyc are 1-6 sequential Gly  
 XX residues and X, Y, Z are Ala, Ser, Val, Ile, Leu, Met, Phe, Pro or Thr  
 XX and n can be anything between 1-66. X, Y and Z need not be identical from  
 XX n repeat to n repeat. Alternatively a nucleic acid encoding a stabilising  
 XX polypeptide can be linked onto or inserted into a nucleic acid encoding a  
 XX core protein. The fusion proteins of the invention are more resistant to  
 XX degradation by proteases and, thus, have a longer half-life than the  
 XX unfused core protein. The products can be used for treating autoimmune  
 XX diseases, cancer and inflammation. In particular, the core protein may be  
 XX an IkappaB regulator protein for the treatment of inflammatory bowel  
 XX disease, or a nitroreductase protein which can activate nitro drugs in  
 XX enzyme/prodrug therapy to treat cancer or other pathological conditions.  
 XX The fusion proteins can also be used in diagnostic methods such as in  
 XX vivo imaging. (Updated on 27-AUG-2003 to correct OS field.)  
 XX  
 XX Sequence 24 BP; 5 A; 14 C; 3 G; 2 T; 0 U; 0 Other;  
 SQ

Query Match 0.6%; Score 13; DB 1; Length 24;  
 Best Local Similarity 76.2%; Pred. No. 9.7e+02;  
 Matches 16; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 296 TGCTCTCGAGCTGTGTGGTGG 316  
 |||||  
 DB 23 TGCTCTCGAGGTGCGGTGG 3

RESULT 383  
 AAX22501/c  
 ID AAX22501 standard; RNA; 16 BP.  
 XX  
 XX AAX22501;  
 AC  
 XX  
 XX 25-MAR-2003 (revised)  
 DT 21-MAY-1999 (first entry)  
 DT  
 XX  
 XX Streptomyces sp. glnA gene RBS RNA fragment.  
 DE  
 XX  
 XX Xylanase; acidophilic; thermostable; XYL I; XYL II; plant biomass;  
 XX hemicellulase; beta-1,4 bond; xylosic chain; xylan; D-xylose; paper;  
 XX pulp; chlorine bleaching; feed; beta-glucan; cellulose; lignin; ds.  
 XX  
 XX Streptomyces sp.  
 OS  
 OS US5871730-A.  
 PN  
 XX  
 XX 16-FEB-1999.  
 PD  
 XX  
 XX 29-JUL-1994; 94US-00282197.  
 PF  
 XX 29-JUL-1994; 94US-00282197.  
 PR  
 XX (UYSH ) UNIV SHERBROOKE.  
 PA  
 XX  
 XX Beaulieu C, Brzezinski R, Dery CV;  
 PI  
 XX WPI; 1996-141348/14.  
 DR  
 XX  
 XX New acidophilic and thermostable xylanase enzymes from Actinomadura sp.  
 XX FC7 - useful for treating plant biomass, especially paper and wood pulp,  
 XX to degrade hemicellulose and hydrolyse xylan.  
 XX  
 XX Example 7; Fig 7; 60pp; English.  
 XX





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PR 28-SEP-1994; 94US-00314397.
PR 03-OCT-1994; 94US-00316771.
PR 07-OCT-1994; 94US-00319492.
PR 11-OCT-1994; 94US-00321993.
PR 04-NOV-1994; 94US-00334847.
PR 10-NOV-1994; 94US-00337608.
PR 28-NOV-1994; 94US-00345516.
PR 16-DEC-1994; 94US-00357577.
PR 23-DEC-1994; 94US-00363233.
PR 30-JAN-1995; 95US-00380734.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Stinchcomb DT, Chowrira B, Drenzo A, Draper KG, Dudycz LW;
PI Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
PI Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
PI Tracz D, Usman N, Wincott FE, Woolf T;
XX
DR WPI; 1995-351090/45.
XX
XX Ribozymes having modified bases and methods for producing them - for use
PT in inhibiting disease related genes.
PT
PS Claim 2; Page 201; 407pp; English.
XX
CC The present sequence represents a preferred target sequence for an
CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves ICAM-1 mRNA at the
CC nucleotide base position indicated in the DE line. Regions of the mRNA
CC that do not form secondary folding structures and that contain potential
CC hammerhead and hairpin ribozyme cleavage sites were identified by
CC computer analysis. Ribozymes directed against these mRNA sequences were
CC designed and synthesised with modifications that improve their nuclease
CC resistance. The ribozymes cleave the ICAM-1 target sequences and thereby
CC inhibit ICAM-1 expression, making them useful for reducing transplant
CC rejection and alleviating symptoms in patients with rheumatoid arthritis,
CC asthma and other inflammatory disorders. (Updated on 25-MAR-2003 to
CC correct PI field.)
XX
SQ Sequence 17 BP; 4 A; 7 C; 1 G; 0 T; 5 U; 0 Other;
XX
Query Match 0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 62.5%; Pred. No. 4.2e+02;
Matches 10; Conservative 4; Mismatches 2; Indels 0; Gaps 0;
QY 1170 CAACCTTTGGGCTCCC 1185
DB 1 CAACUUUUCAGCUCCC 16
XX
RESULT 386
AAT53529
XX AAT53529 standard; RNA; 17 BP.
XX
AC AAT53529;
XX
XX
DT 25-MAR-2003 (revised)
DT 27-MAR-1997 (first entry)
XX
XX Rat ICAM hammerhead ribozyme target sequence (nt. position 988).
XX
XX Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
XX gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
XX intercellular adhesion molecule; rel A; tumour necrosis factor;
XX TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
XX Philadelphia chromosome; inflammation; leukoemia; CML; cancer;
XX atherosclerosis; myocardial infarction; autoimmune disease;
XX transplant rejection; rheumatoid arthritis; stroke; restenosis;
XX myocardial ischaemia; Kawasaki disease; psoriasis;
XX human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
XX ss.
XX
XX Rattus rattus.

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XX WO9523225-A2.
PN
XX 31-AUG-1995.
XX
XX 23-FEB-1995; 95WO-IB000156.
XX
PR 23-FEB-1994; 94US-00201109.
PR 29-MAR-1994; 94US-00218934.
PR 04-APR-1994; 94US-00222795.
PR 07-APR-1994; 94US-00224483.
PR 15-APR-1994; 94US-00227958.
PR 15-APR-1994; 94US-00228041.
PR 18-MAY-1994; 94US-00245736.
PR 06-JUL-1994; 94US-00271280.
PR 15-AUG-1994; 94US-00291932.
PR 16-AUG-1994; 94US-00291433.
PR 17-AUG-1994; 94US-00292620.
PR 19-AUG-1994; 94US-00293520.
PR 02-SEP-1994; 94US-00300000.
PR 08-SEP-1994; 94US-00303039.
PR 23-SEP-1994; 94US-00311486.
PR 23-SEP-1994; 94US-00311749.
PR 28-SEP-1994; 94US-00314397.
PR 03-OCT-1994; 94US-00316771.
PR 07-OCT-1994; 94US-00319492.
PR 11-OCT-1994; 94US-00321993.
PR 04-NOV-1994; 94US-00334847.
PR 10-NOV-1994; 94US-00337608.
PR 28-NOV-1994; 94US-00345516.
PR 16-DEC-1994; 94US-00357577.
PR 23-DEC-1994; 94US-00363233.
PR 30-JAN-1995; 95US-00380734.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
XX Stinchcomb DT, Chowrira B, Drenzo A, Draper KG, Dudycz LW;
XX Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
XX Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
XX Tracz D, Usman N, Wincott FE, Woolf T;
XX
DR WPI; 1995-351090/45.
XX
XX Ribozymes having modified bases and methods for producing them - for use
PT in inhibiting disease related genes.
PT
PS Claim 2; Page 202; 407pp; English.
XX
XX The present sequence represents a preferred target sequence for an
XX enzymatic nucleic acid (i.e. a ribozyme) which cleaves ICAM-1 mRNA at the
XX nucleotide base position indicated in the DE line. Regions of the mRNA
XX that do not form secondary folding structures and that contain potential
XX hammerhead and hairpin ribozyme cleavage sites were identified by
XX computer analysis. Ribozymes directed against these mRNA sequences were
XX designed and synthesised with modifications that improve their nuclease
XX resistance. The ribozymes cleave the ICAM-1 target sequences and thereby
XX inhibit ICAM-1 expression, making them useful for reducing transplant
XX rejection and alleviating symptoms in patients with rheumatoid arthritis,
XX asthma and other inflammatory disorders. (Updated on 25-MAR-2003 to
XX correct PI field.)
XX
SQ Sequence 17 BP; 4 A; 7 C; 1 G; 0 T; 5 U; 0 Other;
XX
Query Match 0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 62.5%; Pred. No. 4.2e+02;
Matches 10; Conservative 4; Mismatches 2; Indels 0; Gaps 0;
QY 1170 CAACCTTTGGGCTCCC 1185
DB 2 CAACUUUUCAGCUCCC 17
XX
RESULT 387

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AAT53726  
 ID AAT53726 standard; RNA; 17 BP.  
 AC AAT53726;  
 XX  
 DT 25-MAR-2003 (revised)  
 DT 03-APR-1997 (first entry)  
 XX  
 DE Rat ICAM hammerhead ribozyme target sequence (nt. position 2823).  
 XX  
 KW Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;  
 KW gene expression; downregulation; interleukin-5; IL-5; ICAM-1;  
 KW intercellular adhesion molecule; rel A; tumour necrosis factor;  
 KW TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;  
 KW translocation; chronic myelogenous leukaemia; CML; cancer;  
 KW Philadelphia chromosome; inflammation; autoimmune disease;  
 KW atherosclerosis; myocardial infarction; stroke; restenosis;  
 KW transplant rejection; rheumatoid arthritis; psoriasis;  
 KW myocardial ischaemia; Kawasaki disease; septic shock; HIV;  
 KW human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;  
 KW ss.  
 XX  
 OS Rattus rattus.  
 XX  
 XX  
 PN WO9523225-A2.  
 XX  
 XX  
 PD 31-AUG-1995.  
 XX  
 XX  
 PF 23-FEB-1995; 95WO-IB000156.  
 XX  
 XX  
 PR 23-FEB-1994; 94US-00201109.  
 PR 29-MAR-1994; 94US-00218934.  
 PR 04-APR-1994; 94US-00222795.  
 PR 07-APR-1994; 94US-00224483.  
 PR 15-APR-1994; 94US-00227958.  
 PR 15-APR-1994; 94US-00228041.  
 PR 18-MAY-1994; 94US-00245736.  
 PR 06-JUL-1994; 94US-00271280.  
 PR 15-AUG-1994; 94US-00291932.  
 PR 16-AUG-1994; 94US-00291433.  
 PR 17-AUG-1994; 94US-00292620.  
 PR 19-AUG-1994; 94US-00293520.  
 PR 02-SEP-1994; 94US-00300000.  
 PR 08-SEP-1994; 94US-00303039.  
 PR 23-SEP-1994; 94US-00311486.  
 PR 23-SEP-1994; 94US-00311749.  
 PR 28-SEP-1994; 94US-00314397.  
 PR 03-OCT-1994; 94US-00316771.  
 PR 07-OCT-1994; 94US-00319492.  
 PR 11-OCT-1994; 94US-00321993.  
 PR 04-NOV-1994; 94US-00334847.  
 PR 10-NOV-1994; 94US-00337608.  
 PR 28-NOV-1994; 94US-00345516.  
 PR 16-DEC-1994; 94US-00357577.  
 PR 23-DEC-1994; 94US-00363233.  
 PR 30-JAN-1995; 95US-00380734.  
 XX  
 XX (RIBO-) RIBOZYME PHARM INC.  
 XX  
 XX Stinchcomb DT, Chowrira B, Drenzo A, Draper KG, Dudycz LW;  
 PI Grimm S, Karpeisky A, Kisch K, Metulic-Adamic J, Mcswiggen JA;  
 PI Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;  
 PI Tracz D, Usman N, Wincott FE, Woolf T;  
 XX WPI; 1995-351090/45.  
 DR  
 XX Ribozymes having modified bases and methods for producing them - for use  
 PT in inhibiting disease related genes.  
 PT  
 XX Claim 2; Page 204; 407pp; English.  
 PS  
 XX The present sequence represents a preferred target sequence for an  
 CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves ICAM-1 mRNA at the

CC nucleotide base position indicated in the DE line. Regions of the mRNA  
 CC that do not form secondary folding structures and that contain potential  
 CC hammerhead and hairpin ribozyme cleavage sites were identified by  
 CC computer analysis. Ribozymes directed against these mRNA sequences were  
 CC designed and synthesised with modifications that improve their nuclease  
 CC resistance. The ribozymes cleave the ICAM-1 target sequences and thereby  
 CC inhibit ICAM-1 expression, making them useful for reducing transplant  
 CC rejection and alleviating symptoms in patients with rheumatoid arthritis,  
 CC asthma and other inflammatory disorders. (Updated on 25-MAR-2003 to  
 CC correct PI field.)  
 XX  
 SQ Sequence 17 BP; 4 A; 7 C; 1 G; 0 T; 5 U; 0 Other;  
 Query Match 0.6%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 62.5%; Pred. No. 4.2e+02;  
 Matches 10; Conservative 4; Mismatches 2; Indels 0; Gaps 0;  
 QY 1170 CAACUUCAGCUCGCC 1185  
 Db 1 CAACUUCAGCUCGCC 16  
 RESULT 388  
 AAX73233/C  
 ID AAX73233 standard; RNA; 17 BP.  
 XX  
 AC AAX73233;  
 XX  
 DT 28-JUL-1999 (first entry)  
 XX  
 DE Mouse flk-1 VEGF receptor hammerhead ribozyme substrate #666.  
 XX  
 KW Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;  
 KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;  
 KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;  
 KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;  
 KW foetal liver kinase 1; ss.  
 XX  
 OS Mus sp.  
 XX  
 XX WO9715662-A2.  
 PN  
 PD 01-MAY-1997.  
 XX  
 XX 25-OCT-1996; 96WO-US017480.  
 XX  
 XX 26-OCT-1995; 95US-0005974P.  
 PR 11-JAN-1996; 96US-00584040.  
 XX  
 XX (RIBO-) RIBOZYME PHARM INC.  
 PA (CHIR) CHIRON CORP.  
 XX  
 XX Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;  
 WPI; 1997-259017/23.  
 XX  
 PT Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA  
 PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,  
 PT rheumatoid arthritis, etc., in a human patient.  
 XX  
 PS Claim 4; Page 144; 218pp; English.  
 XX  
 CC The present invention describes nucleic acid molecules which modulate the  
 CC synthesis, expression and/or stability of a mRNA encoding 1 or more  
 CC receptors of vascular endothelial growth factor (VEGF). A patient  
 CC (preferably human) having a condition associated with the level of the  
 CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing  
 CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour  
 CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be  
 CC treated by administering the nucleic acid molecule or the expression  
 CC vector to the patient. AAX67275 to AAX75752 represent specific examples  
 CC of nucleic acid molecules from the present invention

SQ Sequence 17 BP; 1 A; 7 C; 4 G; 0 T; 5 U; 0 Other;

Query Match 0.6%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 87.5%; Pred. No. 4.2e+02;  
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1278 GGAGGACAGCGCCAC 1293  
 |||||  
 17 GGAGGACAGAGTCCAC 2

Db

RESULT 389  
 AAV97482  
 ID AAV97482 standard; RNA; 17 BP.  
 AC AAV97482;  
 XX  
 XX  
 XX  
 DT 17-MAR-1999 (first entry)  
 XX  
 DE Human EGF-R target sequence nucleotide position 2306.  
 XX  
 KW Human; epidermal growth factor receptor; EGF-R; target sequence;  
 KW hammerhead ribozyme; hairpin ribozyme; inhibition; cell proliferation;  
 KW cancer; genetic drift; detection; mutation; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 FN WO9833893-A2.  
 XX  
 PD 06-AUG-1998.  
 XX  
 PF 14-JAN-1998; 98WO-US000730.  
 XX  
 PR 31-JAN-1997; 97US-0036476P.  
 PR 04-DEC-1997; 97US-00985162.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 PA (UYAS-) UNIV ASTON.  
 XX  
 PI Akhtar S, Fell P, Mcswiggen JA;  
 XX  
 WPI; 1998-437449/37.  
 XX  
 DR Enzymatic nucleic acids - which cleave RNA derived from an epidermal  
 PT growth factor receptor, useful for inhibiting cell proliferation and for  
 PT treating cancers.  
 XX  
 PS Claim 5; Page 73; 109pp; English.  
 XX  
 CC The present invention describes enzymatic nucleic acid molecules (NAMS)  
 CC which specifically cleave RNA derived from an epidermal growth factor  
 CC receptor (EGF-R) gene. AAV97221 to AAV98043 and AAV98979 to AAV99090  
 CC represent specifically claimed target sequence from human EGF-R. AAV98044  
 CC to AAV98866 and AAV98867 to V9878 represent hammerhead ribozymes and  
 CC hairpin ribozymes respectively for human EGF-R. The NAMS are useful for  
 CC cleaving EGF-R RNA in the treatment of a condition associated with EGF-R  
 CC expression levels e.g. to inhibit cell proliferation in the prevention or  
 CC treatment of cancers. The NAMS can also be used as diagnostic tools to  
 CC examine genetic drift and mutations within diseased cells or to detect  
 CC the presence of EGF-R RNA in a cell  
 XX

SQ Sequence 17 BP; 7 A; 1 C; 6 G; 0 T; 3 U; 0 Other;

Query Match 0.6%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 75.0%; Pred. No. 4.2e+02;  
 Matches 12; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy 1024 GGGGAGCTTGAAGAA 1039  
 |||||  
 1 GAGGAUCUUGAAGAA 16

Db

RESULT 390  
 AAV59454  
 ID AAV59454 standard; DNA; 17 BP.  
 AC AAV59454;  
 XX  
 XX  
 DT 16-JUL-1999 (first entry)  
 XX  
 DE Primer used in construction of humanised anti-HM1.24 antibody.  
 XX

AAV39410  
 ID AAV39410 standard; DNA; 17 BP.  
 XX  
 AC AAV39410;  
 XX  
 DT 21-SEP-1998 (first entry)  
 XX  
 DE Humanised anti-HM1.24 antibody PCR primer SEQ ID NO:72.  
 XX  
 KW Mouse; human; humanised; anti-HM1.24 antibody; myeloma; FR; CDR;  
 KW framework region; complementarity determining region; antigenicity;  
 KW PCR primer; ss.  
 XX  
 OS Synthetic.  
 OS Mus sp.  
 OS Homo sapiens.  
 XX  
 FN WO9814580-A1.  
 XX  
 PD 09-APR-1998.  
 XX  
 PF 03-OCT-1997; 97WO-JP003553.  
 XX  
 PR 04-OCT-1996; 96JP-00264756.  
 XX  
 PA (CHUS) CHUGAI SEIYAKU KK.  
 XX  
 PI Ono K, Ohtomo T, Tsuchiya M, Yoshimura Y, Koishihara Y, Kosaka M;  
 XX  
 WPI; 1998-286421/25.  
 XX  
 DR Humanised anti-HM1.24 antibody - for treatment of myeloma.  
 PT  
 XX  
 PS Example 9; Page 140; 210pp; Japanese.  
 XX  
 CC A humanised anti-HM1.24 antibody has been developed which comprises human  
 CC L and H chain C regions, and L and/or H chain V regions containing  
 CC material originating in mouse anti-HM1.24 antibody. The V regions contain  
 CC framework (FR) regions of human origin and complementarity determining  
 CC regions (CDR) of mouse origin, leading to a reshaped humanised antibody.  
 CC The C regions are human Ck (L-chain) and human C gamma (especially C  
 CC gamma 1) (H-chain). The FR regions of the L chain V region are derived  
 CC from human subtype HSG1 (e.g. from human antibody RE1) and the FR regions  
 CC of the H chain V region are derived from human subtype HSG1 (e.g. FR1-3  
 CC from human antibody HG3 and FR4 from human antibody JH6). The present  
 CC sequence represents a PCR primer used in an example from the present  
 CC invention. The antibodies are used for the treatment of myeloma,  
 CC especially by injection, intravenously, intramuscularly or  
 CC subcutaneously. The antibodies are used at 0.01-1000 (especially 5-100)  
 CC mg/kg body weight. The humanised antibody has low antigenicity and is  
 CC therefore effective therapeutically in humans  
 XX

SQ Sequence 17 BP; 5 A; 7 C; 4 G; 1 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 87.5%; Pred. No. 4.2e+02;  
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1057 GCCCAAAACCCAAAGCT 1072  
 |||||  
 1 GCCCAAAAGCCAAAGT 16

Db

RESULT 391  
 AAX59454  
 ID AAX59454 standard; DNA; 17 BP.  
 AC AAX59454;  
 XX  
 XX  
 DT 16-JUL-1999 (first entry)  
 XX  
 DE Primer used in construction of humanised anti-HM1.24 antibody.  
 XX

KW Reconstituted human antibody; peptide antigen HM1.24; framework region;  
 KW complementary determining region; CDR; anti-HM1.24 antibody; myeloma;  
 KW humanised antibody; primer; ss.  
 XX Synthetic.  
 OS  
 XX  
 XX WO9918212-A1.  
 XX  
 XX  
 XX 15-APR-1999.  
 XX  
 XX 02-OCT-1998; 98WO-JP004469.  
 XX  
 XX 03-OCT-1997; 97JP-00271726.  
 XX  
 XX (CHUS ) CHUGAI SEIYAKU KK.  
 XX  
 XX Tsuchiya M;  
 XX  
 XX WPI; 1999-277273/23.  
 XX  
 XX Reconstituted human antibody useful in the treatment of myeloma.  
 PT  
 XX  
 XX Disclosure; Page 120; 256pp; Japanese.  
 XX  
 XX The specification describes a reconstituted human antibody recognizing  
 CC the peptide antigen HM1.24. This human antibody contains natural human  
 CC framework regions modified by amino acid substitutions to provide  
 CC homogeneity with a previously designed framework region (which may arise  
 CC from a human or non-human source); and complementary determining regions  
 CC (CDR) derived from a non-human anti-HM1.24 antibody. The reconstituted  
 CC antibody is useful in the treatment of diseases in which the surface  
 CC antigen HM1.24 is implicated such as myeloma. The present sequence is  
 CC used in the creation of the antibodies of the invention  
 XX  
 XX Sequence 17 BP; 5 A; 7 C; 4 G; 1 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.6%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 87.5%; Pred. No. 4.2e+02;  
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1057 GCCCAAAACCAAGCT 1072  
 DB 1 GCCCAAAACCAAGGT 16  
 RESULT 392  
 AAA17471  
 ID AAA17471 standard; RNA; 17 BP.  
 XX  
 XX AAA17471;  
 AC  
 XX  
 XX 19-JUN-2000 (first entry)  
 DT  
 XX  
 DE Aryl hydrocarbon nuclear transport substrate sequence SEQ ID NO:697.  
 XX  
 KW Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;  
 KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;  
 KW hammerhead ribozyme; angiogenic factor; cytosolic; antidiabetic;  
 KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;  
 KW dermatologic; RNA cleavage; cancer; diabetic retinopathy; arthritis;  
 KW age related macular degeneration; inflammation; neovascular glaucoma;  
 KW myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;  
 KW tuberosus sclerosis; pot-wine stain; Sturge Weber syndrome;  
 KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO9950403-A2.  
 XX  
 XX 07-OCT-1999.  
 PD  
 XX  
 XX 24-MAR-1999; 99WO-US006507.  
 PF  
 XX  
 XX  
 PR 27-MAR-1998; 98US-0079678P.  
 XX  
 XX (RIBO-) RIBOZYME PHARM INC.  
 PA  
 XX Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;  
 PI  
 XX WPI; 1999-591315/50.  
 XX  
 XX Novel ribozymes for modulating the synthesis, expression and/or stability  
 PT of an mRNA encoding an angiogenic factors.  
 XX  
 XX Claim 53; Page 82; 305pp; English.  
 PS  
 XX  
 XX The present invention describes enzymatic nucleic acid molecules with RNA  
 CC cleaving activity, which specifically cleave RNA encoded by an aryl  
 CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3  
 CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to  
 CC AAAL7167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,  
 CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their  
 CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to  
 CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086  
 CC and AAA19155 to AAA19222 represent their corresponding target sequences;  
 CC AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme  
 CC sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and  
 CC AAA21596 to AAA21688 represent their corresponding target sequences;  
 CC AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence  
 CC for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to  
 CC AAA23422 represent their corresponding target sequences. The ribozymes of  
 CC the invention are used for modulating the synthesis, expression and/or  
 CC stability of an mRNA encoding angiogenic factor, especially ARNT,  
 CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are  
 CC especially used to treat cancer, diabetic retinopathy, age related  
 CC macular degeneration (ARMD), inflammation, and arthritis, as well as  
 CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,  
 CC angiofibroma of tuberosus sclerosis, pot-wine stains, Sturge Weber  
 CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,  
 CC and other syndromes and diseases related to the levels of ARNT, Tie-2,  
 CC integrin subunit alpha-6, or integrin subunit beta-3  
 XX  
 XX Sequence 17 BP; 2 A; 8 C; 1 G; 0 T; 6 U; 0 Other;  
 SQ  
 Query Match 0.6%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 62.5%; Pred. No. 4.2e+02;  
 Matches 10; Conservative 4; Mismatches 2; Indels 0; Gaps 0;  
 QY 1126 TCCACCTTCACCTCCA 1141  
 DB 1 UCCUCCUUCAGCUCCA 16  
 RESULT 393  
 AAA17399  
 ID AAA17399 standard; RNA; 17 BP.  
 XX  
 XX AAA17399;  
 AC  
 XX  
 XX 19-JUN-2000 (first entry)  
 DT  
 XX  
 DE Aryl hydrocarbon nuclear transport substrate sequence SEQ ID NO:625.  
 XX  
 KW Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;  
 KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;  
 KW hammerhead ribozyme; angiogenic factor; cytosolic; antidiabetic;  
 KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;  
 KW dermatologic; RNA cleavage; cancer; diabetic retinopathy; arthritis;  
 KW age related macular degeneration; inflammation; neovascular glaucoma;  
 KW myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;  
 KW tuberosus sclerosis; pot-wine stain; Sturge Weber syndrome;  
 KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO9950403-A2.  
 XX  
 XX 07-OCT-1999.  
 PD  
 XX  
 XX 24-MAR-1999; 99WO-US006507.  
 PF  
 XX  
 XX

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XX PD 07-OCT-1999.
XX OS Homo sapiens.
XX PF 24-MAR-1999; 99WO-US006507.
XX PN WO9950403-A2.
XX PR 27-MAR-1998; 98US-0079678P.
XX PP (RIBO-) RIBOZYME PHARM INC.
XX PI Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;
XX DR WPI; 1999-591315/50.
XX PT Novel ribozymes for modulating the synthesis, expression and/or stability
XX of an mRNA encoding an angiogenic factors.
XX PS Claim 53; Page 77; 305pp; English.
XX CC The present invention describes enzymatic nucleic acid molecules with RNA
CC cleaving activity, which specifically cleave RNA encoded by an aryl
CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to
CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
CC and AAA17168 to AAA17560 and AAA17623 to AAA18385 and AAA19087 to
CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
CC and AAA19155 to AAA19222 represent their corresponding target sequences;
CC AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme
CC sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
CC AAA21596 to AAA21688 represent their corresponding target sequences;
CC AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence
CC for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
CC AAA23422 represent their corresponding target sequences. The ribozymes of
CC the invention are used for modulating the synthesis, expression and/or
CC stability of an mRNA encoding angiogenic factor, especially ARNT,
CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
CC especially used to treat cancer, diabetic retinopathy, age related
CC macular degeneration (ARMD), inflammation, and arthritis, as well as
CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
CC angiofibroma of tuberosus sclerosis, pot-wine stains, Sturge Weber
CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
CC and other syndromes and diseases related to the levels of ARNT, Tie-2,
CC integrin subunit alpha-6, or integrin subunit beta-3
XX
SQ Sequence 17 BP; 5 A; 5 C; 4 G; 0 T; 3 U; 0 Other;
Query Match 0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 68.8%; Pred. No. 4.2e+02;
Matches 11; Conservative 3; Mismatches 2; Indels 0; Gaps 0;
QY 1261 AACCCCTTCAGAGT 1276
Db 1 AAGCCCCUUGAGAGU 16
RESULT 394
AAA17470
ID AAA17470 standard; RNA; 17 BP.
AC AAA17470;
XX
XX 19-JUN-2000 (first entry)
XX
XX Aryl hydrocarbon nuclear transport substrate sequence SEQ ID NO:696.
XX
XX Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
XX integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
XX hammerhead ribozyme; angiogenic factor; cytosolic; antidiabetic;
XX ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
XX dermatologic; RNA cleavage; cancer; diabetic retinopathy; arthritis;
XX age related macular degeneration; inflammation; neovascular glaucoma;
XX myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
XX tuberosus sclerosis; pot-wine stain; Sturge Weber syndrome;

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KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
XX
XX Homo sapiens.
XX PN WO9950403-A2.
XX PR 07-OCT-1999.
XX PP 24-MAR-1999; 99WO-US006507.
XX PR 27-MAR-1998; 98US-0079678P.
XX PP (RIBO-) RIBOZYME PHARM INC.
XX PI Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;
XX DR WPI; 1999-591315/50.
XX PT Novel ribozymes for modulating the synthesis, expression and/or stability
XX of an mRNA encoding an angiogenic factors.
XX PS Claim 53; Page 81; 305pp; English.
XX CC The present invention describes enzymatic nucleic acid molecules with RNA
CC cleaving activity, which specifically cleave RNA encoded by an aryl
CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to
CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
CC and AAA17168 to AAA17560 and AAA17623 to AAA18385 and AAA19087 to
CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
CC and AAA19155 to AAA19222 represent their corresponding target sequences;
CC AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme
CC sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
CC AAA21596 to AAA21688 represent their corresponding target sequences;
CC AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence
CC for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
CC AAA23422 represent their corresponding target sequences. The ribozymes of
CC the invention are used for modulating the synthesis, expression and/or
CC stability of an mRNA encoding angiogenic factor, especially ARNT,
CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
CC especially used to treat cancer, diabetic retinopathy, age related
CC macular degeneration (ARMD), inflammation, and arthritis, as well as
CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
CC angiofibroma of tuberosus sclerosis, pot-wine stains, Sturge Weber
CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
CC and other syndromes and diseases related to the levels of ARNT, Tie-2,
CC integrin subunit alpha-6, or integrin subunit beta-3
XX
SQ Sequence 17 BP; 3 A; 8 C; 1 G; 0 T; 5 U; 0 Other;
Query Match 0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 62.5%; Pred. No. 4.2e+02;
Matches 10; Conservative 4; Mismatches 2; Indels 0; Gaps 0;
QY 1126 TCACCTTCACCTCCA 1141
Db 2 UCCUCCUUGAGUCCA 17
RESULT 395
AAAF01927
ID AAFA01927 standard; DNA; 17 BP.
XX
XX AAFA01927;
XX
XX 16-FEB-2001 (first entry)
XX
XX Hammerhead ribozyme substrate #222.
XX
XX Ribozyme; erythropoietin; granulocyte colony stimulating factor;
XX interferon alpha; ss.
XX

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OS Homo sapiens.  
 XX WO200061729-A2.  
 XX PD 19-OCT-2000.  
 XX PF 11-APR-2000; 2000WO-US009721.  
 XX PR 12-APR-1999; 99US-0129390P.  
 XX PA (RIBO-) RIBOZYME PHARM INC.  
 XX PI Blatt L, Zwick M, Pavco P, Mcswiggen J;  
 XX WPI; 2000-647423/62.  
 XX Enzymatic and antisense nucleic acid inhibition of repressor genes,  
 PT useful for producing e.g. granulocyte colony stimulating factor protein,  
 PT interferon alpha and erythropoietin.  
 XX Claim 37; Page 61; 164pp; English.  
 XX The present invention relates to enzymatic and antisense nucleic acid  
 CC molecules that act as inhibitors of the expression of repressor genes  
 CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription  
 CC factor gene, IRF-2 and/or the CAAT Transcription Protein (CTP).  
 CC Inhibition of the repressors removes prevents inhibition (and  
 CC consequently increases expression of) genes involved in the production of  
 CC erythropoietin, granulocyte colony stimulating factor protein and  
 CC interferon alpha  
 XX Sequence 17 BP; 1 A; 7 C; 2 G; 7 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.6%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 87.5%; Pred. No. 4.2e+02;  
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1167 TCCCACTTTGGGCT 1182  
 DB 1 TCCCACTTTGGGCT 16  
 RESULT 396  
 ABRK02379/c  
 ID ABRK02379 standard; RNA; 17 BP.  
 XX ABRK02379;  
 AC ABRK02379;  
 XX 12-MAR-2002 (first entry)  
 DT Human NOGO Amberyse #51.  
 DE  
 XX Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;  
 KW cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;  
 KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;  
 KW DNazyme; inozyme; G-cleaver; amberyse; zinzyme; lymphoma; leukaemia;  
 KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;  
 KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;  
 KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;  
 KW inflammatory arthropathy; central nervous system injury;  
 KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;  
 KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;  
 KW Parkinson's disease; ataxia; Huntington's disease;  
 KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.  
 XX  
 OS Homo sapiens.  
 OS Synthetic.  
 XX WO200159103-A2.  
 XX 16-AUG-2001.  
 PD 09-FEB-2001; 2001WO-US004273.  
 PF

XX 11-FEB-2000; 2000US-0181797P.  
 DR 28-FEB-2000; 2000US-0185516P.  
 PR 06-MAR-2000; 2000US-0187128P.  
 XX (RIBO-) RIBOZYME PHARM INC.  
 PA (BLAT/) BLATT L.  
 PA (MCSW/) MCSWIGGEN J.  
 PA (CHOW/) CHOWRIRA B M.  
 XX Blatt L, Mcswiggen J, Chowrira BM;  
 XX WPI; 2001-607195/69.  
 XX Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense  
 PT constructs, which down regulate expression of a CD20 gene or neurite  
 PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and  
 PT central nervous system injury.  
 XX Claim 88; Page 131; 200pp; English.  
 XX The invention relates to a nucleic acid molecule which down regulates  
 CC expression of a CD20 gene and a nucleic acid molecule which down  
 CC regulates expression of a neurite growth inhibitor gene (NOGO). The  
 CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a  
 CC DNazyme) an inozyme (an endolytic nucleic acid cleaving an RNA molecule  
 CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or  
 CC an amberyse (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA  
 CC with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA  
 CC of CD20 in the presence of a divalent cation that is preferably Mg<sup>2+</sup>.  
 CC Furthermore, it may be contacted with a cell to reduce CD20 activity of  
 CC the cell and treat a patient having a condition associated with the level  
 CC of CD20. The treatment may further comprise the use of one or more  
 CC therapies. In particular, the CD20 targeting nucleic acid may be used to  
 CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-  
 CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic  
 CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell  
 CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,  
 CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-  
 CC targeting nucleic acid is used to cleave RNA of the NOGO gene in the  
 CC presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, the  
 CC nucleic acid may be contacted with a cell to reduce NOGO activity of the  
 CC cell and treat a patient having a condition associated with the level of  
 CC NOGO. The treatment may further comprise the use of one or more  
 CC therapies. In particular, the NOGO-targetting nucleic acid may be used to  
 CC treat central nervous system (CNS) injury and cerebrovascular accident  
 CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),  
 CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),  
 CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob  
 CC disease, muscular dystrophy, and/or other neurodegenerative disease  
 CC states which respond to the modulation of NOGO expression. The present  
 CC sequence is an amberyse molecule of the invention  
 XX Sequence 17 BP; 3 A; 2 C; 9 G; 0 T; 3 U; 0 Other;  
 SQ  
 Query Match 0.6%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 87.5%; Pred. No. 4.2e+02;  
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1130 CCTTCACCTCCAGCTC 1145  
 DB 16 CCAGCACCTCCAGCTC 1  
 RESULT 397  
 ABA79728/c  
 ID ABA79728 standard; DNA; 17 BP.  
 XX ABA79728;  
 AC ABA79728;  
 XX 24-JAN-2002 (first entry)  
 DT Factor IX mutation correcting oligonucleotide SEQ ID NO: 2574.  
 XX

XX KW Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;  
 KW retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;  
 KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;  
 KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;  
 KW haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOB;  
 KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;  
 KW familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;  
 KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;  
 KW Alzheimer's disease; cytostatic; antiskilling; antianaemic; haemostatic;  
 KW antilipemic; ss.  
 XX OS Homo sapiens.  
 XX PN WO200173002-A2.  
 XX PD 04-OCT-2001.  
 XX PF 27-MAR-2001; 2001WO-US009761.  
 XX PR 27-MAR-2000; 2000US-0192176P.  
 XX PR 27-MAR-2000; 2000US-0192179P.  
 XX PR 01-JUN-2000; 2000US-0208538P.  
 XX PR 30-OCT-2000; 2000US-0244989P.  
 XX PA (UYDE ) UNIV DELAWARE.  
 XX PI Kmiec EB, Gamper HB, Rice MC;  
 XX WPI; 2001-639230/73.  
 XX DR Oligonucleotide for targeted alterations of genetic sequences and for  
 PT treating cystic fibrosis, comprises at least one mismatch and chemical  
 PT modification.  
 XX PS Claim 7; Page 189; 294pp; English.  
 XX SS The present invention provides single-stranded oligonucleotides which can  
 CC be used for the targeted alteration of genomic sequences, where the  
 CC oligonucleotide has at least one mismatch compared with the genomic  
 CC sequence to be altered. In particular, these sequences are directed at  
 CC the following genes: adenosine deaminase, p53, beta-globin,  
 CC retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A  
 CC (CDKN2A), APC, Factor V, Factor VII, Factor IX, haemoglobin alpha locus  
 CC 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,  
 CC apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase  
 CC (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and  
 CC presenilin-2 (PSEN2). These can be used in the gene therapy of diseases  
 CC such as cancer, adenosine deaminase deficiency, cystic fibrosis,  
 CC haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,  
 CC Alzheimer's disease, melanoma, adenomatous polyposis of the colon and  
 CC various syndromes. The present sequence is one of the gene correcting  
 CC oligonucleotides of the invention  
 XX SQ Sequence 17 BP; 5 A; 2 C; 7 G; 3 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 87.5%; Pred. NO. 4.2e+02;  
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1224 CATCCTTGGCAGCGC 1239  
 Db 16 CATCCTTGGCACTGCC 1  
 RESULT 398  
 ABA79729  
 ID ABA79729 standard; DNA; 17 BP.  
 XX AC ABA79729;  
 XX DT 24-JAN-2002 (first entry)  
 XX

DE Factor IX mutation correcting oligonucleotide SEQ ID NO: 2575.  
 XX KW Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;  
 KW retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;  
 KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;  
 KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;  
 KW haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOB;  
 KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;  
 KW familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;  
 KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;  
 KW Alzheimer's disease; cytostatic; antiskilling; antianaemic; haemostatic;  
 KW antilipemic; ss.  
 XX OS Homo sapiens.  
 XX PN WO200173002-A2.  
 XX PD 04-OCT-2001.  
 XX PF 27-MAR-2001; 2001WO-US009761.  
 XX PR 27-MAR-2000; 2000US-0192176P.  
 XX PR 27-MAR-2000; 2000US-0192179P.  
 XX PR 01-JUN-2000; 2000US-0208538P.  
 XX PR 30-OCT-2000; 2000US-0244989P.  
 XX PA (UYDE ) UNIV DELAWARE.  
 XX PI Kmiec EB, Gamper HB, Rice MC;  
 XX WPI; 2001-639230/73.  
 XX DR Oligonucleotide for targeted alterations of genetic sequences and for  
 PT treating cystic fibrosis, comprises at least one mismatch and chemical  
 PT modification.  
 XX PS Claim 7; Page 189; 294pp; English.  
 XX SS The present invention provides single-stranded oligonucleotides which can  
 CC be used for the targeted alteration of genomic sequences, where the  
 CC oligonucleotide has at least one mismatch compared with the genomic  
 CC sequence to be altered. In particular, these sequences are directed at  
 CC the following genes: adenosine deaminase, p53, beta-globin,  
 CC retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A  
 CC (CDKN2A), APC, Factor V, Factor VII, Factor IX, haemoglobin alpha locus  
 CC 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,  
 CC apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase  
 CC (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and  
 CC presenilin-2 (PSEN2). These can be used in the gene therapy of diseases  
 CC such as cancer, adenosine deaminase deficiency, cystic fibrosis,  
 CC haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,  
 CC Alzheimer's disease, melanoma, adenomatous polyposis of the colon and  
 CC various syndromes. The present sequence is one of the gene correcting  
 CC oligonucleotides of the invention  
 XX SQ Sequence 17 BP; 3 A; 7 C; 2 G; 5 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 87.5%; Pred. NO. 4.2e+02;  
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1224 CATCCTTGGCAGCGC 1239  
 Db 2 CATCCTTGGCACTGCC 17  
 RESULT 399  
 ABA79720/c  
 ID ABA79720 standard; DNA; 17 BP.  
 XX AC ABA79720;  
 XX DT 24-JAN-2002 (first entry)  
 XX

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XX DE Factor IX mutation correcting oligonucleotide SEQ ID NO: 2566.
XX DE
XX DE Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
XX KW retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
XX KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;
XX KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
XX KW haemophilia; alpha thalassemia; haemoglobin alpha locus 1; MLH1; APOE;
XX KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
XX KW familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;
XX KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
XX KW Alzheimer's disease; cytoskeletal; antitickling; antianaemic; haemostatic;
XX KW antileptic; ss.
XX OS Homo sapiens.
XX FN WO200173002-A2.
XX PD 04-OCT-2001.
XX PF 27-MAR-2001; 2001WO-US009761.
XX PR 27-MAR-2000; 2000US-0192176P.
XX PR 27-MAR-2000; 2000US-0192176P.
XX PR 01-JUN-2000; 2000US-0208538P.
XX PR 30-OCT-2000; 2000US-0244989P.
XX PA (UYDE ) UNIV DELAWARE.
XX PI Kmiec EB, Gamper HB, Rice MC;
XX FI WPI; 2001-639230/73.
XX DR
XX PT Oligonucleotide for targeted alterations of genetic sequences and for
XX PT treating cystic fibrosis, comprises at least one mismatch and chemical
XX PT modification.
XX PS Claim 7; Page 189; 294pp; English.
XX CC The present invention provides single-stranded oligonucleotides which can
XX CC be used for the targeted alteration of genomic sequences, where the
XX CC oligonucleotide has at least one mismatch compared with the genomic
XX CC sequence to be altered. In particular, these sequences are directed at
XX CC the following genes: adenosine deaminase, p53, beta-globin,
XX CC retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A
XX CC (CDKN2A), APC, Factor V, Factor VII, Factor IX, haemoglobin alpha locus
XX CC 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
XX CC apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
XX CC (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
XX CC presenilin-2 (PSN2). These can be used in the gene therapy of diseases
XX CC such as cancer, adenosine deaminase deficiency, cystic fibrosis,
XX CC haemophilia, hypercholesterolaemia, thalassemia, sickle cell anaemia,
XX CC Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
XX CC various syndromes. The present sequence is one of the gene correcting
XX CC oligonucleotides of the invention
XX SQ Sequence 17 BP; 4 A; 3 C; 7 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 12.8; DB 1; Length 17;
XX Best Local Similarity 87.5%; Pred. No. 4.2e+02;
XX Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 1224 CATCCTTGGCAGGCC 1239
XX Db |||||
XX 17 CATCCTTGGCACTGCC 2
XX
XX RESULT 400
XX ABA79724/c
XX ID ABA79724 standard; DNA; 17 BP.
XX XX
XX AC ABA79724;
XX XX

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DT 24-JAN-2002 (first entry)
DE Factor IX mutation correcting oligonucleotide SEQ ID NO: 2570.
DE
DE Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
XX KW retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
XX KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;
XX KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
XX KW haemophilia; alpha thalassemia; haemoglobin alpha locus 1; MLH1; APOE;
XX KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
XX KW familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;
XX KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
XX KW Alzheimer's disease; cytoskeletal; antitickling; antianaemic; haemostatic;
XX KW antileptic; ss.
XX OS Homo sapiens.
XX FN WO200173002-A2.
XX PD 04-OCT-2001.
XX PF 27-MAR-2001; 2001WO-US009761.
XX PR 27-MAR-2000; 2000US-0192176P.
XX PR 27-MAR-2000; 2000US-0192176P.
XX PR 01-JUN-2000; 2000US-0208538P.
XX PR 30-OCT-2000; 2000US-0244989P.
XX PA (UYDE ) UNIV DELAWARE.
XX PI Kmiec EB, Gamper HB, Rice MC;
XX FI WPI; 2001-639230/73.
XX DR
XX PT Oligonucleotide for targeted alterations of genetic sequences and for
XX PT treating cystic fibrosis, comprises at least one mismatch and chemical
XX PT modification.
XX PS Claim 7; Page 189; 294pp; English.
XX CC The present invention provides single-stranded oligonucleotides which can
XX CC be used for the targeted alteration of genomic sequences, where the
XX CC oligonucleotide has at least one mismatch compared with the genomic
XX CC sequence to be altered. In particular, these sequences are directed at
XX CC the following genes: adenosine deaminase, p53, beta-globin,
XX CC retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A
XX CC (CDKN2A), APC, Factor V, Factor VII, Factor IX, haemoglobin alpha locus
XX CC 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
XX CC apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
XX CC (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
XX CC presenilin-2 (PSN2). These can be used in the gene therapy of diseases
XX CC such as cancer, adenosine deaminase deficiency, cystic fibrosis,
XX CC haemophilia, hypercholesterolaemia, thalassemia, sickle cell anaemia,
XX CC Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
XX CC various syndromes. The present sequence is one of the gene correcting
XX CC oligonucleotides of the invention
XX SQ Sequence 17 BP; 4 A; 3 C; 7 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 12.8; DB 1; Length 17;
XX Best Local Similarity 87.5%; Pred. No. 4.2e+02;
XX Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 1224 CATCCTTGGCAGGCC 1239
XX Db |||||
XX 17 CATCCTTGGCACTGCC 2
XX
XX RESULT 401
XX ABA79725
XX ID ABA79725 standard; DNA; 17 BP.
XX XX
XX AC ABA79725;
XX XX

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XX AC ABN02791;  
XX DT 29-MAY-2002 (first entry)  
XX DE Human GDMPLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:2783.  
XX KW Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;  
XX KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;  
XX KW skeletal muscle disorder; amplicon; screening; ss.  
XX OS Homo sapiens.  
XX PN WO200192524-A2.  
XX DT 06-DEC-2001.  
XX PF 25-MAY-2001; 2001WO-US016981.  
XX PR 26-MAY-2000; 2000US-0207456P.  
XX PR 21-SEP-2000; 2000US-0234687P.  
XX PR 27-SEP-2000; 2000US-0236359P.  
XX PR 04-OCT-2000; 2000GB-00024263.  
XX PR 30-JAN-2001; 2001WO-US000661.  
XX PR 30-JAN-2001; 2001WO-US000662.  
XX PR 30-JAN-2001; 2001WO-US000663.  
XX PR 30-JAN-2001; 2001WO-US000664.  
XX PR 30-JAN-2001; 2001WO-US000665.  
XX PR 30-JAN-2001; 2001WO-US000666.  
XX PR 30-JAN-2001; 2001WO-US000667.  
XX PR 30-JAN-2001; 2001WO-US000668.  
XX PR 30-JAN-2001; 2001WO-US000669.  
XX PR 30-JAN-2001; 2001WO-US000670.  
XX PR 05-FEB-2001; 2001US-0266860P.  
XX PA (ABOM-) ABOMICA INC.  
XX PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;  
XX WPI; 2002-179446/23.  
XX DR New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,  
XX PT or as specific biomolecule capture probes for surface-enhanced laser  
XX PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.  
XX PS Disclosure; SEQ ID NO 2783; 214pp; English.  
XX CC The present invention describes a human genome-derived myosin-like  
XX CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-  
XX CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1  
XX CC nucleic acids can be used as probes to detect, characterise and quantify  
XX CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to  
XX CC provide initial substrates for the recombinant engineering of hGDMPLP-1  
XX CC protein variants having desired phenotypic improvements, and for  
XX CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be  
XX CC used as immunogens to raise antibodies that specifically recognise hGDMPLP  
XX CC -1 proteins, as standards in assays used to determine the concentration  
XX CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule  
XX CC capture probes for surface-enhanced laser desorption/ionisation, as  
XX CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1  
XX CC production, and in vaccines or for replacement therapy. The  
XX CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a  
XX CC disorder associated with the expression of hGDMPLP-1, in particular heart  
XX CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.  
XX CC The present sequence represents an oligomer used in the screening of the  
XX CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.  
XX CC The sequence data for this patent did not form part of the printed  
XX CC specification, but was obtained in electronic format directly from WIPO  
XX CC at ftp.wipo.int/pub/published\_pct\_sequence  
SQ Sequence 17 BP; 4 A; 8 C; 1 G; 4 T; 0 U; 0 Other;  
Query Match 0.6%; Score 12.8; DB 1; Length 17;

Best Local Similarity 87.5%; Pred. No. 4.2e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
Qy 1022 AGGGGAGCTTGAAGG 1037  
Db 16 AGGTGGTGGCTTGAAGG 1  
RESULT 404  
ABN00978  
ID ABN00978 standard; DNA; 17 BP.  
XX AC ABN00978;  
XX DT 29-MAY-2002 (first entry)  
XX DE Human GDMPLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:970.  
XX KW Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;  
XX KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;  
XX KW skeletal muscle disorder; amplicon; screening; ss.  
XX OS Homo sapiens.  
XX PN WO200192524-A2.  
XX PD 06-DEC-2001.  
XX PF 25-MAY-2001; 2001WO-US016981.  
XX PR 26-MAY-2000; 2000US-0207456P.  
XX PR 21-SEP-2000; 2000US-0234687P.  
XX PR 27-SEP-2000; 2000US-0236359P.  
XX PR 04-OCT-2000; 2000GB-00024263.  
XX PR 30-JAN-2001; 2001WO-US000661.  
XX PR 30-JAN-2001; 2001WO-US000662.  
XX PR 30-JAN-2001; 2001WO-US000663.  
XX PR 30-JAN-2001; 2001WO-US000664.  
XX PR 30-JAN-2001; 2001WO-US000665.  
XX PR 30-JAN-2001; 2001WO-US000666.  
XX PR 30-JAN-2001; 2001WO-US000667.  
XX PR 30-JAN-2001; 2001WO-US000668.  
XX PR 30-JAN-2001; 2001WO-US000669.  
XX PR 30-JAN-2001; 2001WO-US000670.  
XX PR 05-FEB-2001; 2001US-0266860P.  
XX PA (ABOM-) ABOMICA INC.  
XX PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;  
XX WPI; 2002-179446/23.  
XX DR New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,  
XX PT or as specific biomolecule capture probes for surface-enhanced laser  
XX PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.  
XX PS Disclosure; SEQ ID NO 970; 214pp; English.  
XX CC The present invention describes a human genome-derived myosin-like  
XX CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-  
XX CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1  
XX CC nucleic acids can be used as probes to detect, characterise and quantify  
XX CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to  
XX CC provide initial substrates for the recombinant engineering of hGDMPLP-1  
XX CC protein variants having desired phenotypic improvements, and for  
XX CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be  
XX CC used as immunogens to raise antibodies that specifically recognise hGDMPLP  
XX CC -1 proteins, as standards in assays used to determine the concentration  
XX CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule  
XX CC capture probes for surface-enhanced laser desorption/ionisation, as  
XX CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1  
XX CC production, and in vaccines or for replacement therapy. The  
XX CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a  
XX CC disorder associated with the expression of hGDMPLP-1, in particular heart  
XX CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.  
XX CC The present sequence represents an oligomer used in the screening of the  
XX CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.  
XX CC The sequence data for this patent did not form part of the printed  
XX CC specification, but was obtained in electronic format directly from WIPO  
XX CC at ftp.wipo.int/pub/published\_pct\_sequence  
SQ Sequence 17 BP; 4 A; 8 C; 1 G; 4 T; 0 U; 0 Other;  
Query Match 0.6%; Score 12.8; DB 1; Length 17;



XX The present invention relates to human testis expressed Patched like  
 CC protein (HTPL, see ABV78759 to ABV78762 and AB98519 to AB98520). HTPL  
 CC has two isoforms, with a few single base pair differences between the  
 CC two. One of the single base pair changes introduces a premature stop  
 CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL  
 CC shares an overall structure organisation with the Patched protein. The  
 CC shared structural features strongly imply that HTPL plays a role similar  
 CC to that of Patched, and is a potential tumour suppressor. HTPL is  
 CC important in regulating male germ cell development, and the HTPL gene was  
 CC useful for diagnosing a disorder caused by mutation in HTPL, and in  
 CC therapy and manufacture of a medicament for treatment or prevention of  
 CC such disorder associated with decreased expression or activity of human  
 CC HTPL. Such disorders include disorders of testis, or adrenal, adult and  
 CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,  
 CC skeletal muscle or colon function. HTPL proteins and nucleic acids are  
 CC clinically useful diagnostic markers and potential therapeutic agents for  
 CC male infertility and cancer. The present oligonucleotide was used in an  
 CC example from the invention

XX Sequence 17 BP; 10 A; 4 C; 2 G; 1 T; 0 U; 0 Other;  
 SQ Query Match 0.6%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 87.5%; Pred. No. 4.2e+02;  
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 914 TTGGTCTTTGCTTTT 929  
 |||||  
 Db 17 TTGGTCTTTGCTTTGT 2

RESULT 407  
 ABV79664/C  
 ID ABV79664 standard; DNA; 17 BP.  
 AC ABV79664;  
 XX 03-JAN-2003 (first entry)  
 XX Human HTPL scanning oligonucleotide SEQ ID 910.  
 DE Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;  
 KW human testis expressed Patched like protein; testis; adrenal; liver;  
 KW male germ cell development; bone marrow; brain; kidney; lung; placenta;  
 KW prostate; skeletal muscle; colon; male infertility; cancer; ss.  
 XX Homo sapiens.  
 OS  
 PN EP1229046-A2.  
 PD 07-AUG-2002.

XX 28-JAN-2002; 2002EP-00001167.  
 XX 30-JAN-2001; 2001WO-US000663.  
 PR 30-JAN-2001; 2001WO-US000664.  
 PR 30-JAN-2001; 2001WO-US000665.  
 PR 30-JAN-2001; 2001WO-US000667.  
 PR 30-JAN-2001; 2001WO-US000668.  
 PR 30-JAN-2001; 2001WO-US000669.  
 PR 23-MAY-2001; 2001US-00864761.  
 PR 09-OCT-2001; 2001US-0327898P.  
 XX (AEOM-) AEOMICA INC.  
 PA  
 XX Zhan J;  
 XX WPI; 2002-676582/73.

XX Novel isolated human testis expressed Patched like protein (HTPL), useful  
 PT for identifying agonist and antagonist and specific binding partners, and  
 PT for treating subjects having defects in HTPL.

XX Example 2; Page 183; 718pp; English.  
 PS The present invention relates to human testis expressed Patched like  
 XX protein (HTPL, see ABV78759 to ABV78762 and AB98519 to AB98520). HTPL  
 CC has two isoforms, with a few single base pair differences between the  
 CC two. One of the single base pair changes introduces a premature stop  
 CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL  
 CC shares an overall structure organisation with the Patched protein. The  
 CC shared structural features strongly imply that HTPL plays a role similar  
 CC to that of Patched, and is a potential tumour suppressor. HTPL is  
 CC important in regulating male germ cell development, and the HTPL gene was  
 CC useful for diagnosing a disorder caused by mutation in HTPL, and in  
 CC therapy and manufacture of a medicament for treatment or prevention of  
 CC such disorder associated with decreased expression or activity of human  
 CC HTPL. Such disorders include disorders of testis, or adrenal, adult and  
 CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,  
 CC skeletal muscle or colon function. HTPL proteins and nucleic acids are  
 CC clinically useful diagnostic markers and potential therapeutic agents for  
 CC male infertility and cancer. The present oligonucleotide was used in an  
 CC example from the invention

SQ Sequence 17 BP; 4 A; 5 C; 6 G; 2 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 87.5%; Pred. No. 4.2e+02;  
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 749 TGTGCACTGCGATGC 764  
 |||||  
 Db 17 TGTTCACCTGCCAGGC 2

RESULT 408  
 ABV79665/C  
 ID ABV79665 standard; DNA; 17 BP.  
 XX ABV79665;  
 AC ABV79665;  
 XX 03-JAN-2003 (first entry)  
 XX Human HTPL scanning oligonucleotide SEQ ID 911.  
 DE Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;  
 KW human testis expressed Patched like protein; testis; adrenal; liver;  
 KW male germ cell development; bone marrow; brain; kidney; lung; placenta;  
 KW prostate; skeletal muscle; colon; male infertility; cancer; ss.  
 XX Homo sapiens.  
 OS  
 PN EP1229046-A2.  
 PD 07-AUG-2002.

XX 28-JAN-2002; 2002EP-00001167.  
 XX 30-JAN-2001; 2001WO-US000663.  
 PR 30-JAN-2001; 2001WO-US000664.  
 PR 30-JAN-2001; 2001WO-US000665.  
 PR 30-JAN-2001; 2001WO-US000667.  
 PR 30-JAN-2001; 2001WO-US000668.  
 PR 30-JAN-2001; 2001WO-US000669.  
 PR 23-MAY-2001; 2001US-00864761.  
 PR 09-OCT-2001; 2001US-0327898P.  
 XX (AEOM-) AEOMICA INC.  
 PA  
 XX Zhan J;  
 XX WPI; 2002-676582/73.

XX Novel isolated human testis expressed Patched like protein (HTPL), useful  
 PT for identifying agonist and antagonist and specific binding partners, and  
 PT for treating subjects having defects in HTPL.

PT	for identifying agonist and antagonist and specific binding partners, and	XX	Novel isolated human testis expressed patched like protein (HTPL), useful
PT	for treating subjects having defects in HTPL.	PT	for identifying agonist and antagonist and specific binding partners, and
XX	Example 2; Page 183; 718pp; English.	PT	for treating subjects having defects in HTPL.
XX	The present invention relates to human testis expressed Patched like	XX	Example 2; Page 633; 718pp; English.
CC	protein (HTPL, see ABV78759 to ABV78762 and ABB98519 to ABB98520). HTPL	CC	Thé present invention relates to human testis expressed Patched like
CC	has two isoforms, with a few single base pair differences between the	CC	protein (HTPL, see ABV78759 to ABV78762 and ABB98519 to ABB98520). HTPL
CC	two. One of the single base pair changes introduces a premature stop	CC	has two isoforms, with a few single base pair differences between the
CC	codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL	CC	two. One of the single base pair changes introduces a premature stop
CC	shares an overall structure organisation with the Patched protein. The	CC	codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL
CC	shared structural features strongly imply that HTPL plays a role similar	CC	shares an overall structure organisation with the Patched protein. The
CC	to that of Patched, and is a potential tumour suppressor. HTPL is	CC	shared structural features strongly imply that HTPL plays a role similar
CC	important in regulating male germ cell development, and the HTPL gene was	CC	to that of Patched, and is a potential tumour suppressor. HTPL is
CC	mapped to human chromosome 10p12.1. HTPL and its coding sequence are	CC	important in regulating male germ cell development, and the HTPL gene was
CC	useful for diagnosing a disorder caused by mutation in HTPL, and in	CC	mapped to human chromosome 10p12.1. HTPL and its coding sequence are
CC	therapy and manufacture of a medicament for treatment or prevention of	CC	useful for diagnosing a disorder caused by mutation in HTPL, and in
CC	such disorder associated with decreased expression or activity of human	CC	therapy and manufacture of a medicament for treatment or prevention of
CC	foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,	CC	such disorder associated with decreased expression or activity of human
CC	skeletal muscle or colon function. HTPL proteins and nucleic acids are	CC	foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
CC	clinically useful diagnostic markers and potential therapeutic agents for	CC	skeletal muscle or colon function. HTPL proteins and nucleic acids are
CC	male infertility and cancer. The present oligonucleotide was used in an	CC	clinically useful diagnostic markers and potential therapeutic agents for
CC	example from the invention	CC	male infertility and cancer. The present oligonucleotide was used in an
XX	Sequence 17 BP; 5 A; 4 C; 6 G; 2 T; 0 U; 0 Other;	XX	example from the invention
SQ	Query Match 0.6%; Score 12.8; DB 1; Length 17;	SQ	Sequence 17 BP; 9 A; 4 C; 2 G; 2 T; 0 U; 0 Other;
	Best Local Similarity 87.5%; Pred. No. 4.2e+02;		Query Match 0.6%; Score 12.8; DB 1; Length 17;
	Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;		Best Local Similarity 87.5%; Pred. No. 4.2e+02;
QY	749 TGTGCACCTGCCATGC 764	QY	14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Db	16 TGTTCACCTGCCAGGC 1	Db	914 TTGGTCTTTGCCCTTTT 929
			16 TTGGTCTTTGACTTGT 1
RESULT 409		RESULT 410	
ABV83096/c		ABV80008/c	
ID	ABV83096 standard; DNA; 17 BP.	ID	ABV80008 standard; DNA; 17 BP.
XX	ABV83096;	XX	ABV80008;
AC	03-JAN-2003 (first entry)	AC	03-JAN-2003 (first entry)
DT	Human HTPL scanning oligonucleotide SEQ ID 4342.	DT	Human HTPL scanning oligonucleotide SEQ ID 1254.
DE	Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;	DE	Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;
XX	human testis expressed patched like protein; testis; adrenal; liver;	XX	human testis expressed patched like protein; testis; adrenal; liver;
KW	male germ cell development; bone marrow; brain; kidney; lung; placenta;	KW	male germ cell development; bone marrow; brain; kidney; lung; placenta;
KW	prostate; skeletal muscle; colon; male infertility; cancer; ss.	KW	prostate; skeletal muscle; colon; male infertility; cancer; ss.
XX	Homo sapiens.	XX	Homo sapiens.
OS	EP1229046-A2.	OS	EP1229046-A2.
FN	07-AUG-2002.	FN	07-AUG-2002.
XX	28-JAN-2002; 2002EP-00001167.	XX	28-JAN-2002; 2002EP-00001167.
PF	30-JAN-2001; 2001WO-US000663.	PF	30-JAN-2001; 2001WO-US000663.
PR	30-JAN-2001; 2001WO-US000664.	PR	30-JAN-2001; 2001WO-US000664.
PR	30-JAN-2001; 2001WO-US000665.	PR	30-JAN-2001; 2001WO-US000665.
PR	30-JAN-2001; 2001WO-US000666.	PR	30-JAN-2001; 2001WO-US000666.
PR	30-JAN-2001; 2001WO-US000667.	PR	30-JAN-2001; 2001WO-US000667.
PR	30-JAN-2001; 2001WO-US000668.	PR	30-JAN-2001; 2001WO-US000668.
PR	30-JAN-2001; 2001WO-US000669.	PR	30-JAN-2001; 2001WO-US000669.
PR	23-MAY-2001; 2001US-00864761.	PR	23-MAY-2001; 2001US-00864761.
PR	09-OCT-2001; 2001US-0327898P.	PR	09-OCT-2001; 2001US-0327898P.
XX	(AEOM-) AEOMICA INC.	XX	(AEOM-) AEOMICA INC.
PA	Zhan J;	PA	Zhan J;
PI	WPI; 2002-676582/73.	PI	Zhan J;
DR			

```

XX WPI; 2002-676582/73.
XX
XX Novel isolated human testis expressed Patched like protein (HTPL), useful
XX for identifying agonist and antagonist and specific binding partners, and
XX for treating subjects having defects in HTPL.
XX
XX Example 2; Page 228; 718pp; English.
XX
XX The present invention relates to human testis expressed Patched like
XX protein (HTPL, see ABV78759 to ABV78762 and AB98519 to AB98520). HTPL
XX has two isoforms, with a few single base pair differences between the
XX two. One of the single base pair changes introduces a premature stop
XX codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL
XX shares an overall structure organisation with the Patched protein. The
XX shared structural features strongly imply that HTPL plays a role similar
XX to that of Patched, and is a potential tumour suppressor. HTPL is
XX important in regulating male germ cell development, and the HTPL gene was
XX mapped to human chromosome 10p12.1. HTPL and its coding sequence are
XX useful for diagnosing a disorder caused by mutation in HTPL, and in
XX therapy and manufacture of a medicament for treatment or prevention of
XX HTPL. Such disorders include disorders of testis, or adrenal, adult and
XX foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
XX skeletal muscle or colon function. HTPL proteins and nucleic acids are
XX clinically useful diagnostic markers and potential therapeutic agents for
XX male infertility and cancer. The present oligonucleotide was used in an
XX example from the invention
XX
XX Sequence 17 BP; 2 A; 5 C; 4 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 12.8; DB 1; Length 17;
XX Best Local Similarity 87.5%; Pred. No. 4.2e+02;
XX Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 727 TGCCAGGAGAAACACA 742
XX ||||| |||||
XX Db 17 TGCCAGGAGAAACACA 2
XX
XX RESULT 411
XX ABV80009/c
XX ID ABV80009 standard; DNA; 17 BP.
XX
XX AC ABV80009;
XX
XX DT 03-JAN-2003 (first entry)
XX
XX DE Human HTPL scanning oligonucleotide SEQ ID 1255.
XX
XX KW Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;
XX human testis expressed Patched like protein; testis; adrenal; liver;
XX male germ cell development; bone marrow; brain; kidney; lung; placenta;
XX prostate; skeletal muscle; colon; male infertility; cancer; ss.
XX
XX OS Homo sapiens.
XX
XX PN RP1229046-A2.
XX
XX PD 07-AUG-2002.
XX
XX PF 28-JAN-2002; 2002EP-00001167.
XX
XX PR 30-JAN-2001; 2001WO-US000663.
XX
XX PR 30-JAN-2001; 2001WO-US000664.
XX
XX PR 30-JAN-2001; 2001WO-US000665.
XX
XX PR 30-JAN-2001; 2001WO-US000667.
XX
XX PR 30-JAN-2001; 2001WO-US000668.
XX
XX PR 30-JAN-2001; 2001WO-US000669.
XX
XX PR 23-MAY-2001; 2001US-00864761.
XX
XX PR 09-OCT-2001; 2001US-0327898P.
XX
XX PA (AEOM-) AEOMICA INC.
XX
XX Zhan J;
XX
XX WPI; 2002-676582/73.
XX
XX Novel isolated human testis expressed Patched like protein (HTPL), useful
XX for identifying agonist and antagonist and specific binding partners, and
XX for treating subjects having defects in HTPL.
XX
XX Example 2; Page 228; 718pp; English.
XX
XX The present invention relates to human testis expressed Patched like
XX protein (HTPL, see ABV78759 to ABV78762 and AB98519 to AB98520). HTPL
XX has two isoforms, with a few single base pair differences between the
XX two. One of the single base pair changes introduces a premature stop
XX codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL
XX shares an overall structure organisation with the Patched protein. The
XX shared structural features strongly imply that HTPL plays a role similar
XX to that of Patched, and is a potential tumour suppressor. HTPL is
XX important in regulating male germ cell development, and the HTPL gene was
XX mapped to human chromosome 10p12.1. HTPL and its coding sequence are
XX useful for diagnosing a disorder caused by mutation in HTPL, and in
XX therapy and manufacture of a medicament for treatment or prevention of
XX HTPL. Such disorders include disorders of testis, or adrenal, adult and
XX foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
XX skeletal muscle or colon function. HTPL proteins and nucleic acids are
XX clinically useful diagnostic markers and potential therapeutic agents for
XX male infertility and cancer. The present oligonucleotide was used in an
XX example from the invention
XX
XX Sequence 17 BP; 2 A; 4 C; 4 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 12.8; DB 1; Length 17;
XX Best Local Similarity 87.5%; Pred. No. 4.2e+02;
XX Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 727 TGCCAGGAGAAACACA 742
XX ||||| |||||
XX Db 16 TGCCAGGAGAAACACA 1
XX
XX RESULT 412
XX ABK19288
XX ID ABK19288 standard; RNA; 17 BP.
XX
XX AC ABK19288;
XX
XX DT 09-APR-2002 (first entry)
XX
XX DE Human ERG Amberzyme target sequence Seq ID No 1935.
XX
XX KW Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
XX ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;
XX vulnery; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
XX tumour angiogenesis; diabetic retinopathy; macular degeneration;
XX neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
XX angiofibroma of tuberous sclerosis; port-wine stain; wound healing;
XX Sturge Weber syndrome; Kippel-renaunay-Weber syndrome; leukaemia; ss;
XX Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme;
XX amberzyme.
XX
XX OS Homo sapiens.
XX
XX PN WO200188124-A2.
XX
XX PD 22-NOV-2001.
XX
XX PF 16-MAY-2001; 2001WO-US015866.
XX
XX PR 16-MAY-2000; 2000US-00572021.
XX
XX PA (RIBO-) RIBOZYME PHARM INC.

```



PD 06-DEC-2001.  
 XX  
 PF 01-JUN-2001; 2001WO-JP004662.  
 XX  
 PR 01-JUN-2000; 2000JP-00164798.  
 XX  
 XX (NISN) NISSHINBO IND INC.  
 PA (SYST-) SYSTEM RES INC.  
 XX  
 XX Inoko H, Kagiya T, Ichihara T, Matsumura Y, Moriya S, Nishida M;  
 XX WPI; 2002-122074/16.  
 XX  
 XX Human leukocyte antigen (HLA) typing, useful for judging HLA genotypes of  
 PT individuals e.g. by determining immunogenetic differences when  
 PT transplanting between them.  
 XX  
 XX Claim 10; Page 293; 345pp; Japanese.  
 XX  
 XX The invention relates to a typing kit for judging human leukocyte antigen  
 CC (HLA) genotype of a sample by hybridising a substrate on which 10-24 base  
 CC oligonucleotides (ABL30512-ABL31809) originating in the sequences of  
 CC genes e.g. belonging to HLA class I antigens on human genome and  
 CC containing gene polymorphisms as allantoic acids have been immobilised as  
 CC primers for amplification of cleaved nucleic acids relating to gene  
 CC polymorphisms. The method is useful for judging HLA genotypes of  
 CC individuals by determining immunogenetic differences before transplanting  
 CC between them, providing genetic information to decide compatibility of  
 CC organ and tissue for transplantation e.g. of bone marrow, kidney, liver,  
 CC pancreas, Langerhans islet in pancreas and cornea, susceptibility  
 CC diagnosis of genetic diseases and identifying individuals  
 XX  
 XX Sequence 17 BP; 3 A; 4 C; 6 G; 4 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.6%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 87.5%; Pred. No. 4.2e+02;  
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 753 CACCTGCCATCAGGT 768  
 DB |||||  
 17 CACGTGCCATCAGGT 2  
 RESULT 415  
 ID AAD48146/c  
 AC AAD48146 standard; DNA; 17 BP.  
 AC  
 XX  
 XX AAD48146;  
 XX  
 XX 24-FEB-2003 (first entry)  
 XX  
 XX DNA P target DNA used in the exemplification of the invention.  
 DE  
 XX Peptide nucleic acid; PNA; nucleic acid zygosity; genetic analysis;  
 KW scientific investigation; pharmacogenomic; pharmacogenetic; epigenomic;  
 KW ss.  
 XX  
 XX Unidentified.  
 OS  
 XX WO200272865-A2.  
 FN  
 XX 19-SEP-2002.  
 PD  
 XX 09-MAR-2002; 2002WO-US007050.  
 PF  
 XX 09-MAR-2001; 2001US-0274547P.  
 PR  
 XX (BOST-) BOSTON PROBES INC.  
 PA  
 XX Coull JM, Fiandaca MJ, Kristjanson MD, Hyldig-Nielsen JJ;  
 PI Creasey TM;  
 XX WPI; 2003-018741/01.  
 DR

XX Composition for determining target sequence of contiguous nucleobases,  
 PT comprises polynucleobase strand and combination oligomer comprising first  
 PT and second oligomer blocks that are covalently linked to each other.  
 XX  
 XX Example 1; Page 58; 149pp; English.  
 XX  
 XX The present invention relates to combination oligomers, including block  
 CC synthesis of combination of oligomers in the absence of a template. The  
 CC invention relates to a composition comprising a polynucleobase strand and  
 CC a combination oligomer comprising first and second oligomer blocks that  
 CC are each independently a peptide nucleic acid (PNA) covalently linked to  
 CC each other by a linker of at least three atoms in length, where the  
 CC oligomer blocks are sequences specifically hybridised to a target  
 CC sequence of contiguous nucleobases in the polynucleobase strand, to form  
 CC a double stranded target sequence-oligomer complex. The composition is  
 CC used for determining a target sequence of contiguous nucleobases and for  
 CC determining the zygosity of a nucleic acid for a single nucleotide  
 CC polymorphism (SNP). The methods are useful in scientific investigation,  
 CC e.g., for detection, identification and/or enumeration of bacteria,  
 CC viruses and pathogens in food, beverages, water, pharmaceutical products,  
 CC personal care products, dairy products, in clinical samples or in samples  
 CC of plant, animal, human or environmental origin. They are also useful for  
 CC the analysis of raw materials, equipment, products or processes used to  
 CC manufacture or store food, beverages, water, pharmaceutical products,  
 CC personal care products dairy products or environmental samples. The  
 CC methods and materials are useful in areas such as expression analysis,  
 CC SNP analysis, genetic analysis of humans, animals, fungi, yeast viruses  
 CC and plants, therapy monitoring, pharmacogenomics, pharmacogenetics,  
 CC epigenomics and high throughput screening operations. The present  
 CC sequence is a target DNA used in the exemplification of the invention  
 XX  
 XX Sequence 17 BP; 2 A; 2 C; 8 G; 5 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.6%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 87.5%; Pred. No. 4.2e+02;  
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1136 CCTCCAGCTCCACCTA 1151  
 DB |||||  
 16 CCACGAGCTCCACCTA 1  
 RESULT 416  
 ID ABT38079  
 XX ABT38079 standard; DNA; 17 BP.  
 XX  
 XX ABT38079;  
 XX  
 XX 12-JUN-2003 (first entry)  
 XX  
 XX Tumour suppression related human fukutin oligo SEQ ID No 3716.  
 DE  
 XX Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;  
 KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;  
 KW schizophrenia; protein chip; gene therapy; tumour suppression;  
 KW human fukutin; ds.  
 XX  
 XX Homo sapiens.  
 OS  
 XX WO2003025175-A2.  
 FN  
 XX 27-MAR-2003.  
 PD  
 XX 17-SEP-2002; 2002WO-IB004208.  
 PF  
 XX 17-SEP-2001; 2001FR-00011978.  
 PR  
 XX (MOLE-) MOLECULAR ENGINES LAB.  
 PA  
 XX Teerman A, Amson R, Tuijnder M;  
 PI  
 XX WPI; 2003-313353/30.  
 DR





radiation therapy; inflammatory disease; asthma; diabetes;  
 rheumatoid arthritis; restenosis; Crohn's disease; obesity;  
 gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;  
 transplant/graft rejection; reperfusion injury; glomerulonephritis;  
 allergic airway inflammation; inflammatory bowel disease; infection; ss.  
 Synthetic.  
 US2002177568-A1.  
 28-NOV-2002.  
 23-MAY-2001; 2001US-00864785.  
 07-DEC-1992; 92US-00987132.  
 18-MAY-1994; 94US-00245466.  
 15-AUG-1994; 94US-00291932.  
 23-DEC-1996; 96US-00777916.  
 (STIN/) STINCHOMB D T.  
 (MCSW/) MCSWIGGEN J.  
 (DRAP/) DRAPER K G.  
 Stinchcomb DT, Mcswiggen J, Draper KG;  
 WPI; 2003-340953/32.  
 Novel enzymatic nucleic acid molecules which down regulates expression of  
 a sequence encoding a subunit of nuclear factor kappa B useful for  
 treating cancer, inflammatory disorders and autoimmune diseases.  
 Claim 3; Page 47; 72pp; English.  
 The invention describes an enzymatic nucleic acid molecule (I) which down  
 regulates expression of a sequence encoding a subunit of nuclear factor  
 kappa B (NFkB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme  
 configuration. The enzymatic nucleic acid molecule is adapted to treat  
 cancer and is useful for down-regulating REL-A activity in a cell, for  
 treating a patient having a condition associated with the level of REL-A.  
 (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in  
 the presence of a divalent cation, especially Mg<sup>2+</sup>. The enzymatic and  
 antisense nucleic acid molecules are useful for treating breast, lung,  
 prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,  
 cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or  
 multidrug resistant cancer. The method involves use of other drug  
 chemotherapies including paclitaxel, docetaxel, cisplatin, methotrexate,  
 cyclophosphamide, doxorubicin, fluorouracil carboplatin, edatrexate,  
 gemcitabine or radiation therapy. The enzymatic and antisense nucleic  
 acid molecules are also useful for treating inflammatory disease such as  
 rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,  
 obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft  
 rejection, gene therapy applications, ischaemia/reperfusion injury  
 (central nervous system (CNS) and myocardial), glomerulonephritis,  
 sepsis, allergic airway inflammation, inflammatory bowel disease or  
 infection. This sequence represents an enzymatic nucleic acid used to  
 modulate the function of a necrosis factor kappa B sub-unit  
 Sequence 17 BP; 4 A; 3 C; 7 G; 0 T; 3 U; 0 Other;  
 Query Match 0.6%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 87.5%; Pred. No. 4.2e+02;  
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1105 GGCTTCAGTCCCGTGC 1120  
 |||||  
 Db 17 GCCTTCATCCCTGC 2  
 RESULT 419  
 ACA06571  
 ID ACA06571 standard; RNA; 17 BP.  
 XX

ACA06571;  
 03-JUN-2003 (first entry)  
 NFkB sub-unit modulating inozyme substrate #390.  
 Enzymatic nucleic acid; nuclear factor kappa B; NFkB; inozyme; zinzyme;  
 G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human;  
 lung cancer; prostate cancer; colorectal cancer; brain cancer;  
 oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;  
 cervical cancer; head and neck cancer; ovarian cancer; melanoma;  
 lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;  
 chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate;  
 cyclophosphamide; doxorubicin; fluorouracil carboplatin; edatrexate;  
 gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;  
 rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;  
 gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;  
 transplant/graft rejection; reperfusion injury; glomerulonephritis;  
 allergic airway inflammation; inflammatory bowel disease; infection; ss.  
 Homo sapiens.  
 US2002177568-A1.  
 28-NOV-2002.  
 23-MAY-2001; 2001US-00864785.  
 07-DEC-1992; 92US-00987132.  
 18-MAY-1994; 94US-00245466.  
 15-AUG-1994; 94US-00291932.  
 23-DEC-1996; 96US-00777916.  
 (STIN/) STINCHOMB D T.  
 (MCSW/) MCSWIGGEN J.  
 (DRAP/) DRAPER K G.  
 Stinchcomb DT, Mcswiggen J, Draper KG;  
 WPI; 2003-340953/32.  
 Novel enzymatic nucleic acid molecules which down regulates expression of  
 a sequence encoding a subunit of nuclear factor kappa B useful for  
 treating cancer, inflammatory disorders and autoimmune diseases.  
 Claim 3; Page 33; 72pp; English.  
 The invention describes an enzymatic nucleic acid molecule (I) which down  
 regulates expression of a sequence encoding a subunit of nuclear factor  
 kappa B (NFkB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme  
 configuration. The enzymatic nucleic acid molecule is adapted to treat  
 cancer and is useful for down-regulating REL-A activity in a cell, for  
 treating a patient having a condition associated with the level of REL-A.  
 (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in  
 the presence of a divalent cation, especially Mg<sup>2+</sup>. The enzymatic and  
 antisense nucleic acid molecules are useful for treating breast, lung,  
 prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,  
 cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or  
 multidrug resistant cancer. The method involves use of other drug  
 chemotherapies including paclitaxel, docetaxel, cisplatin, methotrexate,  
 cyclophosphamide, doxorubicin, fluorouracil carboplatin, edatrexate,  
 gemcitabine or radiation therapy. The enzymatic and antisense nucleic  
 acid molecules are also useful for treating inflammatory disease such as  
 rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,  
 obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft  
 rejection, gene therapy applications, ischaemia/reperfusion injury  
 (central nervous system (CNS) and myocardial), glomerulonephritis,  
 sepsis, allergic airway inflammation, inflammatory bowel disease or  
 infection. This sequence represents the substrate of a novel enzymatic  
 nucleic acid molecule  
 Sequence 17 BP; 4 A; 10 C; 2 G; 0 T; 1 U; 0 Other;  
 SQ

CC therapies such as monoclonal antibodies, REL-A-specific inhibitors or  
 CC chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,  
 CC cyclophosphamide, doxorubin, fluorouracil carboplatin, edatrexate,  
 CC gemcitabine or radiation therapy. The enzymatic and antisense nucleic  
 CC acid molecules are also useful for treating inflammatory disease such as  
 CC rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,  
 CC obesity, autoimmune disease, lupus, multiple sclerosis, ischaemia/reperfusion injury  
 CC rejection, gene therapy applications, ischaemia/reperfusion injury  
 CC (central nervous system (CNS) and myocardial), glomerulonephritis,  
 CC sepsis, allergic airway inflammation, inflammatory bowel disease or  
 CC infection. This sequence represents the substrate of a novel enzymatic  
 CC nucleic acid molecule  
 XX  
 SQ Sequence 17 BP; 3 A; 11 C; 0 G; 0 T; 3 U; 0 Other;

Query Match 0.6%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 81.2%; Pred. No. 4.2e+02;  
 Matches 13; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1252 CCCATCCCCCAACCC 1267  
 Db 1 CCCAUCGCCAUCUCC 16  
 |||||  
 |||||

RESULT 421  
 ACA06256  
 ID ACA06256 standard; RNA; 17 BP.  
 XX ACA06256;  
 AC ACA06256;  
 DT 03-JUN-2003 (first entry)  
 XX  
 DE NFKB sub-unit modulating inozyme substrate #75.  
 XX  
 KW Enzymatic nucleic acid; nuclear factor kappa B; NFKB; inozyme; zinzyme;  
 KW G-cleaver; amberyne; cancer; REL-A activity; breast cancer; human;  
 KW lung cancer; prostate cancer; colorectal cancer; brain cancer;  
 KW oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;  
 KW cervical cancer; head and neck cancer; ovarian cancer; melanoma;  
 KW lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;  
 KW chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate;  
 KW cyclophosphamide; doxorubin; fluorouracil carboplatin; edatrexate;  
 KW gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;  
 KW rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;  
 KW gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;  
 KW transplant/graft rejection; reperfusion injury; glomerulonephritis;  
 KW allergic airway inflammation; inflammatory bowel disease; infection; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN US2002177568-A1.  
 XX  
 PD 28-NOV-2002.  
 XX  
 PF 23-MAY-2001; 2001US-00864785.  
 XX  
 PR 07-DEC-1992; 92US-00987132.  
 PR 18-MAY-1994; 94US-00245466.  
 PR 15-AUG-1994; 94US-00291932.  
 PR 23-DEC-1996; 96US-00777916.  
 XX  
 (STIN/) STINCHOMB D T.  
 PA (MCSW/) MCSWIGEN J.  
 PA (DRAP/) DRAPER K G.  
 XX  
 PI Stinchcomb DT, Mcswiggen J, Draper KG;  
 XX  
 DR WPI; 2003-340953/32.  
 XX  
 CC Novel enzymatic nucleic acid molecules which down regulates expression of  
 CC a sequence encoding a subunit of nuclear factor kappa B useful for  
 CC treating cancer, inflammatory disorders and autoimmune diseases.  
 XX  
 PS Claim 3; Page 35; 72pp; English.  
 XX  
 CC The invention describes an enzymatic nucleic acid molecule (I) which down  
 CC regulates expression of a sequence encoding a subunit of nuclear factor  
 CC kappa B (NFKB), where (I) is an inozyme, zinzyme, G-cleaver or amberyne  
 CC configuration. The enzymatic nucleic acid molecule is adapted to treat  
 CC cancer and is useful for down-regulating REL-A activity in a cell, for  
 CC treating a patient having a condition associated with the level of REL-A.  
 CC (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in  
 CC the presence of a divalent cation, especially Mg<sup>2+</sup>. The enzymatic and  
 CC antisense nucleic acid molecules are useful for treating breast, lung,  
 CC prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,  
 CC cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or  
 CC multidrug resistant cancer. The method involves use of other drug

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PS Claim 3; Page 28; 72pp; English.
XX
CC The invention describes an enzymatic nucleic acid molecule (I) which down
CC regulates expression of a sequence encoding a subunit of nuclear factor
CC kappa B (NFkB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme
CC configuration. The enzymatic nucleic acid molecule is adapted to treat
CC cancer and is useful for down-regulating REL-A activity in a cell, for
CC treating a patient having a condition associated with the level of REL-A.
CC (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in
CC the presence of a divalent cation, especially Mg2+. The enzymatic and
CC antisense nucleic acid molecules are useful for treating breast, lung,
CC prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,
CC cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or
CC multidrug resistant cancer. The method involves use of other drug
CC therapies such as monoclonal antibodies, REL-A-specific inhibitors or
CC chemotherapies including paclitaxel, docetaxel, cisplatin, methotrexate,
CC cyclophosphamide, doxorubicin, fluorouracil carboplatin, edatrexate,
CC gemcitabine or radiation therapy. The enzymatic and antisense nucleic
CC acid molecules are also useful for treating inflammatory disease such as
CC rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,
CC obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft
CC rejection, gene therapy applications, ischaemia/reperfusion injury
CC (central nervous system (CNS) and myocardial), glomerulonephritis,
CC sepsis, allergic airway inflammation, inflammatory bowel disease or
CC infection. This sequence represents the substrate of a novel enzymatic
CC nucleic acid molecule
XX
SQ Sequence 17 BP; 2 A; 11 C; 3 G; 0 T; 1 U; 0 Other;
Query Match 0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 81.2%; Pred. No. 4.2e+02;
Matches 13; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
QY 1085 CAGGCTTCACCCCCAC 1100
DB 1 CGGCGCCACCCCCAC 16
RESULT 422
ID ACA06763 standard; RNA; 17 BP.
XX ACA06763;
XX
XX 03-JUN-2003 (first entry)
XX
XX NFkB sub-unit modulating inozyme substrate #582.
XX
KW Enzymatic nucleic acid; nuclear factor kappa B; NFkB; inozyme; zinzyme;
KW G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human;
KW lung cancer; prostate cancer; colorectal cancer; brain cancer;
KW oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;
KW cervical cancer; head and neck cancer; ovarian cancer; melanoma;
KW lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;
KW chemotherapies; paclitaxel; docetaxel; cisplatin; methotrexate;
KW cyclophosphamide; doxorubicin; fluorouracil carboplatin; edatrexate;
KW gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;
KW rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;
KW gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;
KW transplant/graft rejection; reperfusion injury; glomerulonephritis;
KW allergic airway inflammation; inflammatory bowel disease; infection; ss.
XX
OS Homo sapiens.
XX
XX US2002177568-A1.
XX
XX 28-NOV-2002.
XX
XX 23-MAY-2001; 2001US-00864785.
XX
XX 07-DEC-1992; 92US-00987132.
XX 18-MAY-1994; 94US-00245466.
XX 15-AUG-1994; 94US-00291932.
XX
PR 23-DEC-1996; 96US-00777916.
XX
PA (STIN/) STINCHOMB D T.
PA (MCSW/) MCSWIGGEN J.
XX (DRAP/) DRAPER K G.
XX
PI Stinchcomb DT, Mcswiggen J, Draper KG;
XX
XX WPI, 2003-340953/32.
XX
XX Novel enzymatic nucleic acid molecules which down regulates expression of
XX a sequence encoding a subunit of nuclear factor kappa B useful for
XX treating cancer, inflammatory disorders and autoimmune diseases.
XX
XX Claim 3; Page 35; 72pp; English.
XX
XX The invention describes an enzymatic nucleic acid molecule (I) which down
XX regulates expression of a sequence encoding a subunit of nuclear factor
XX kappa B (NFkB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme
XX configuration. The enzymatic nucleic acid molecule is adapted to treat
XX cancer and is useful for down-regulating REL-A activity in a cell, for
XX treating a patient having a condition associated with the level of REL-A.
XX (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in
XX the presence of a divalent cation, especially Mg2+. The enzymatic and
XX antisense nucleic acid molecules are useful for treating breast, lung,
XX prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,
XX cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or
XX multidrug resistant cancer. The method involves use of other drug
XX therapies such as monoclonal antibodies, REL-A-specific inhibitors or
XX chemotherapies including paclitaxel, docetaxel, cisplatin, methotrexate,
XX cyclophosphamide, doxorubicin, fluorouracil carboplatin, edatrexate,
XX gemcitabine or radiation therapy. The enzymatic and antisense nucleic
XX acid molecules are also useful for treating inflammatory disease such as
XX rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,
XX obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft
XX rejection, gene therapy applications, ischaemia/reperfusion injury
XX (central nervous system (CNS) and myocardial), glomerulonephritis,
XX sepsis, allergic airway inflammation, inflammatory bowel disease or
XX infection. This sequence represents the substrate of a novel enzymatic
XX nucleic acid molecule
XX
SQ Sequence 17 BP; 2 A; 12 C; 0 G; 0 T; 3 U; 0 Other;
Query Match 0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 81.2%; Pred. No. 4.2e+02;
Matches 13; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
QY 1251 CCCATCCCCCAACCC 1266
DB 2 CCCCAUCCCCCAUCCUC 17
RESULT 423
ADB04345/C
ID ADB04345 standard; DNA; 17 BP.
XX ADB04345;
XX
XX 20-NOV-2003 (first entry)
XX
XX Human MDZ7 scanning oligonucleotide SEQ ID 5331.
XX
XX Cytostatic; immunostimulant; gene therapy; vaccine; human;
XX zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;
XX chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
XX developmental disorder; ss.
XX
XX Homo sapiens.
XX
XX EP1281758-A2.
XX
XX 05-FEB-2003.
XX
XX

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PF 30-JUL-2002; 2002EP-00016874.
XX
PR 02-AUG-2001; 2001US-00922181.
XX
XX (ABOM-) ABOMICA INC.
XX
PI Shannon M, Gu Y, Nguyen C;
XX
XX WPI; 2003-423107/40.
XX
XX New zinc finger-containing proteins and nucleic acids, useful in
PT manufacturing a medicament for treating or preventing a disorder
PT associated with decreased or increased expression or activity of MDZ3,
PT MDZ4, MDZ7 or MDZ12, e.g. cancer.
XX
PS Example 8; SEQ ID NO 5330; 103pp; English.
XX
XX The present invention relates to novel human zinc finger-containing
CC proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is
CC encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2,
CC MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome
CC 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy,
CC or in manufacturing a medicament for treating or preventing a disorder
CC associated with decreased or increased expression or activity of MDZ3,
CC MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic
CC acids and proteins are also useful for diagnosing or monitoring a disease
CC caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic
CC acids can also be used as probes to detect and characterize gross
CC alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are
CC useful in constructing microarrays for measuring gene expression. The
CC proteins are useful as therapeutic agents for gene therapy or as
CC vaccines. The present sequence was used to illustrate the invention.
XX
SQ Sequence 17 BP; 3 A; 9 C; 2 G; 3 T; 0 U; 0 Other;
Query Match 0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1021 GAGGGGAGCTTGAAG 1036
DB 16 GAGGTGGAGCTTGCG 1
RESULT 424
ADB04344/C
ID ADB04344 standard; DNA; 17 BP.
XX
XX ADB04344;
XX
XX 20-NOV-2003 (first entry)
XX
XX Human MDZ7 scanning oligonucleotide SEQ ID 5330.
XX
XX Cytostatic; immunostimulant; gene therapy; vaccine; human;
XX zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;
XX chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
XX developmental disorder; ss.
XX
XX Homo sapiens.
XX
XX EP1281758-A2.
XX
XX 05-FEB-2003.
XX
XX 30-JUL-2002; 2002EP-00016874.
XX
XX 02-AUG-2001; 2001US-00922181.
XX
XX (ABOM-) ABOMICA INC.
XX
XX Shannon M, Gu Y, Nguyen C;
XX
XX Example 8; SEQ ID NO 6101; 103pp; English.
PS

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DR WPI; 2003-423107/40.
XX
XX New zinc finger-containing proteins and nucleic acids, useful in
PT manufacturing a medicament for treating or preventing a disorder
PT associated with decreased or increased expression or activity of MDZ3,
PT MDZ4, MDZ7 or MDZ12, e.g. cancer.
XX
XX Example 8; SEQ ID NO 5330; 103pp; English.
XX
XX The present invention relates to novel human zinc finger-containing
CC proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is
CC encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2,
CC MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome
CC 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy,
CC or in manufacturing a medicament for treating or preventing a disorder
CC associated with decreased or increased expression or activity of MDZ3,
CC MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic
CC acids and proteins are also useful for diagnosing or monitoring a disease
CC caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic
CC acids can also be used as probes to detect and characterize gross
CC alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are
CC useful in constructing microarrays for measuring gene expression. The
CC proteins are useful as therapeutic agents for gene therapy or as
CC vaccines. The present sequence was used to illustrate the invention.
XX
SQ Sequence 17 BP; 4 A; 8 C; 2 G; 3 T; 0 U; 0 Other;
Query Match 0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1021 GAGGGGAGCTTGAAG 1036
DB 17 GAGGTGGAGCTTGCG 2
RESULT 425
ADB05115
ID ADB05115 standard; DNA; 17 BP.
XX
XX ADB05115;
XX
XX 20-NOV-2003 (first entry)
XX
XX Human MDZ12 scanning oligonucleotide SEQ ID 6101.
XX
XX Cytostatic; immunostimulant; gene therapy; vaccine; human;
XX zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;
XX chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
XX developmental disorder; ss.
XX
XX Homo sapiens.
XX
XX EP1281758-A2.
XX
XX 05-FEB-2003.
XX
XX 30-JUL-2002; 2002EP-00016874.
XX
XX 02-AUG-2001; 2001US-00922181.
XX
XX (ABOM-) ABOMICA INC.
XX
XX Shannon M, Gu Y, Nguyen C;
XX
XX WPI; 2003-423107/40.
XX
XX New zinc finger-containing proteins and nucleic acids, useful in
PT manufacturing a medicament for treating or preventing a disorder
PT associated with decreased or increased expression or activity of MDZ3,
PT MDZ4, MDZ7 or MDZ12, e.g. cancer.
XX
XX Example 8; SEQ ID NO 6101; 103pp; English.
PS

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XX SQ Sequence 17 BP; 5 A; 1 C; 7 G; 4 T; 0 U; 0 Other;
Query Match      0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 990 CATTGTTTGTGGGAAA 1005
    ||||| ||||| |||||
Db 2 CATTGAGTGTGGGAAA 17

RESULT 428
ADA99614/c
ID ADA99614 standard; DNA; 17 BP.
XX AC ADA99614;
XX DT 20-NOV-2003 (first entry)
XX DE Human MDZ3 scanning oligonucleotide SEQ ID 603.
XX KW Cytostatic; immunostimulant; gene therapy; vaccine; human;
XX KW zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;
XX KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
XX KW developmental disorder; ss.
XX OS Homo sapiens.
XX PN EP1281758-A2.
XX PD 05-FEB-2003.
XX PF 30-JUL-2002; 2002EP-00016874.
XX PR 02-AUG-2001; 2001US-00922181.
XX FA (ABOM-) ABOMICA INC.
XX PI Shannon M, Gu Y, Nguyen C;
XX WPI; 2003-423107/40.
XX DR
XX PT New zinc finger-containing proteins and nucleic acids, useful in
XX PT manufacturing a medicament for treating or preventing a disorder
XX PT associated with decreased or increased expression or activity of MDZ3,
XX PT MDZ4, MDZ7 or MDZ12, e.g. cancer.
XX PT
XX PS Example 8; SEQ ID NO 603; 103pp; English.
XX CC
XX CC The present invention relates to novel human zinc finger-containing
XX CC proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is
XX CC encoded at chromosome 7q22.1. MDZ4 is encoded at chromosome 6p21.3-22.2.
XX CC MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome
XX CC 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy,
XX CC or in manufacturing a medicament for treating or preventing a disorder
XX CC associated with decreased or increased expression or activity of MDZ3,
XX CC MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic
XX CC acids and proteins are also useful for diagnosing or monitoring a disease
XX CC caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic
XX CC acids can also be used as probes to detect and characterize gross
XX CC alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are
XX CC useful in constructing microarrays for measuring gene expression. The
XX CC proteins are useful as therapeutic agents for gene therapy or as
XX CC vaccines. The present sequence was used to illustrate the invention.
XX SQ Sequence 17 BP; 4 A; 2 C; 7 G; 4 T; 0 U; 0 Other;

Query Match      0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1085 CAGGCTTACCCCCAC 1100

XX SQ Sequence 17 BP; 5 A; 1 C; 7 G; 4 T; 0 U; 0 Other;
Query Match      0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 739 CAGAACACCGGTGCA 754
    ||||| ||||| |||||
Db 16 CAGGGCACCGGTGCA 1

RESULT 430
ABZ61891/c
ID ABZ61891 standard; RNA; 17 BP.
XX AC ABZ61891;
XX DT 21-MAR-2003 (first entry)
XX DE Human HER2 DNzyme substrate #379.
XX KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
XX KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
XX KW anti-rheumatic; cancer; AIDS; ss.
XX OS Homo sapiens.
XX PN WO200297114-A2.
XX PD 05-DEC-2002.
XX PF 29-MAY-2002; 2002WO-US016840.
XX PR 29-MAY-2001; 2001US-0294140P.
XX PR 06-JUN-2001; 2001US-0296249P.
XX PR 10-SEP-2001; 2001US-0318471P.
XX FA (RIBO-) RIBOZYME PHARM INC.
XX PI Mcswiggen J;
XX WPI; 2003-140484/13.
XX DR
XX PT Novel short interfering RNA and enzymatic nucleic acid useful for
XX PT treating cancer, modulates the expression of a nucleic acid encoding
XX PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX PS Claim 4; Page 140; 185pp; English.
XX CC
XX CC The invention relates to a novel short interfering RNA (siRNA) nucleic
XX CC acid molecule or an enzymatic nucleic acid molecule, that modulates
XX CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
XX CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
XX CC acid molecule of the invention has cytostatic, anti-HIV, and anti-
XX CC rheumatic activity. The nucleic acid molecules are useful for reducing
XX CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
XX CC also useful for treating breast, ovarian, colorectal, lung, prostate,
XX CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
XX CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ66531, ABZ66520 - ABZ66524,
XX CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
XX CC ribozymes of the invention
XX SQ Sequence 17 BP; 2 A; 6 C; 6 G; 0 T; 3 U; 0 Other;

Query Match      0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 739 CAGAACACCGGTGCA 754
    ||||| ||||| |||||
Db 16 CAGGGCACCGGTGCA 1

RESULT 430
ABZ61891/c
ID ABZ61891 standard; RNA; 17 BP.
XX AC ABZ61891;
XX DT 21-MAR-2003 (first entry)
XX DE Human HER2 DNzyme substrate #379.
XX KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
XX KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
XX KW anti-rheumatic; cancer; AIDS; ss.
XX OS Homo sapiens.
XX PN WO200297114-A2.
XX PD 05-DEC-2002.
XX PF 29-MAY-2002; 2002WO-US016840.
XX PR 29-MAY-2001; 2001US-0294140P.
XX PR 06-JUN-2001; 2001US-0296249P.
XX PR 10-SEP-2001; 2001US-0318471P.
XX FA (RIBO-) RIBOZYME PHARM INC.
XX PI Mcswiggen J;
XX WPI; 2003-140484/13.
XX DR
XX PT Novel short interfering RNA and enzymatic nucleic acid useful for
XX PT treating cancer, modulates the expression of a nucleic acid encoding
XX PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX PS Claim 4; Page 140; 185pp; English.
XX CC
XX CC The invention relates to a novel short interfering RNA (siRNA) nucleic
XX CC acid molecule or an enzymatic nucleic acid molecule, that modulates
XX CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
XX CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
XX CC acid molecule of the invention has cytostatic, anti-HIV, and anti-
XX CC rheumatic activity. The nucleic acid molecules are useful for reducing
XX CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
XX CC also useful for treating breast, ovarian, colorectal, lung, prostate,
XX CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
XX CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ66531, ABZ66520 - ABZ66524,
XX CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
XX CC ribozymes of the invention
XX SQ Sequence 17 BP; 2 A; 6 C; 6 G; 0 T; 3 U; 0 Other;
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XX DE Human H-Ras DNazyme target #682.
XX DE
XX KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
XX KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytosstatic; anti-HIV;
XX KW anti-rheumatic; cancer; AIDS; ss.
XX OS Homo sapiens.
XX XX WO200297114-A2.
XX PN 05-DEC-2002.
XX PD
XX XX 29-MAY-2002; 2002WO-US016840.
XX PF
XX XX 29-MAY-2001; 2001US-0294140P.
XX PR 06-JUN-2001; 2001US-0296249P.
XX PR 10-SEP-2001; 2001US-0318471P.
XX XX
XX PA (RIBO-) RIBOZYME PHARM INC.
XX XX
XX PI Mcswiggen J;
XX XX WPI; 2003-140484/13.
XX DE
XX XX Novel short interfering RNA and enzymatic nucleic acid useful for
XX PT treating cancer, modulates the expression of a nucleic acid encoding
XX PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX PS Claim 58; Page 124; 185pp; English.
XX XX
XX CC The invention relates to a novel short interfering RNA (siRNA) nucleic
XX CC acid molecule or an enzymatic nucleic acid molecule, that modulates
XX CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
XX CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
XX CC acid molecule of the invention has cytosstatic, anti-HIV, and anti-
XX CC rheumatic activity. The nucleic acid molecules are useful for reducing
XX CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
XX CC also useful for treating breast, ovarian, colorectal, lung, prostate,
XX CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
XX CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
XX CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
XX CC ribozymes of the invention
XX SQ Sequence 17 BP; 1 A; 5 C; 6 G; 0 T; 5 U; 0 Other;
XX
Query Match 0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1293 CAAGCCACAGAGCCTA 1308
DB 16 CAGGCCACAGAGCCGA 1
XX
RESULT 431
ABZ60690
ID ABZ60690 standard; RNA; 17 BP.
XX AC ABZ60690;
XX XX
XX DT 21-MAR-2003 (first entry)
XX DE Human K-Ras DNazyme substrate #802.
XX XX
XX KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
XX KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytosstatic; anti-HIV;
XX KW anti-rheumatic; cancer; AIDS; ss.
XX OS Homo sapiens.
XX XX WO200297114-A2.
XX PN
XX PI Mcswiggen J;
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PD XX 05-DEC-2002.
XX XX 29-MAY-2002; 2002WO-US016840.
XX XX 29-MAY-2001; 2001US-0294140P.
XX PR 06-JUN-2001; 2001US-0296249P.
XX PR 10-SEP-2001; 2001US-0318471P.
XX XX
XX PA (RIBO-) RIBOZYME PHARM INC.
XX XX
XX PI Mcswiggen J;
XX XX WPI; 2003-140484/13.
XX DR
XX XX Novel short interfering RNA and enzymatic nucleic acid useful for
XX PT treating cancer, modulates the expression of a nucleic acid encoding
XX PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX PS Claim 58; Page 100; 185pp; English.
XX XX
XX CC The invention relates to a novel short interfering RNA (siRNA) nucleic
XX CC acid molecule or an enzymatic nucleic acid molecule, that modulates
XX CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
XX CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
XX CC acid molecule of the invention has cytosstatic, anti-HIV, and anti-
XX CC rheumatic activity. The nucleic acid molecules are useful for reducing
XX CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
XX CC also useful for treating breast, ovarian, colorectal, lung, prostate,
XX CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
XX CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
XX CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
XX CC ribozymes of the invention
XX SQ Sequence 17 BP; 5 A; 2 C; 2 G; 0 T; 8 U; 0 Other;
XX
Query Match 0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 43.8%; Pred. No. 4.2e+02;
Matches 7; Conservative 7; Mismatches 2; Indels 0; Gaps 0;
QY 939 CTCATTGTTTAAATG 954
DB 2 CUUCAUGUUUUUUAAG 17
XX
RESULT 432
ABZ64908/c
ID ABZ64908 standard; RNA; 17 BP.
XX AC ABZ64908;
XX XX
XX DT 21-MAR-2003 (first entry)
XX DE Human HER2 DNazyme substrate #365.
XX XX
XX KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
XX KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytosstatic; anti-HIV;
XX KW anti-rheumatic; cancer; AIDS; ss.
XX OS Homo sapiens.
XX XX WO200297114-A2.
XX PN
XX PD 05-DEC-2002.
XX XX
XX PF 29-MAY-2002; 2002WO-US016840.
XX XX
XX PR 29-MAY-2001; 2001US-0294140P.
XX PR 06-JUN-2001; 2001US-0296249P.
XX PR 10-SEP-2001; 2001US-0318471P.
XX XX
XX PA (RIBO-) RIBOZYME PHARM INC.
XX XX
XX PI Mcswiggen J;
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XX DR WPI; 2003-140484/13.
XX
XX PT Novel short interfering RNA and enzymatic nucleic acid useful for
XX PT treating cancer, modulates the expression of a nucleic acid encoding
XX PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
XX PS Claim 4; Page 140; 185pp; English.
XX
XX CC The invention relates to a novel short interfering RNA (siRNA) nucleic
XX CC acid molecule or an enzymatic nucleic acid molecule, that modulates
XX CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
XX CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
XX CC acid molecule of the invention has cytostatic, anti-HIV, and anti-
XX CC rheumatic activity. The nucleic acid molecules are useful for reducing
XX CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
XX CC also useful for treating breast, ovarian, colorectal, lung, prostate,
XX CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
XX CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
XX CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
XX CC ribozymes of the invention
XX
XX SQ Sequence 17 BP; 3 A; 3 C; 8 G; 0 T; 3 U; 0 Other;
XX
XX Query Match 0.6%; Score 12.8; DB 1; Length 17;
XX Best Local Similarity 87.5%; Pred. No. 4.2e+02;
XX Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
Qy 1110 CAGTCCCGTCCCGAGT 1125
Db 16 CAGTCCACTGCCAGT 1
XX
XX RESULT 433
XX ACD63373/c
XX ID ACD63373 standard; RNA; 17 BP.
XX AC ACD63373;
XX
XX DT 30-SEP-2003 (first entry)
XX
XX DE HCV minus strand DNazyme substrate sequence #1012.
XX
XX KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
XX KW RNA stability; RNA expression; RNA synthesis; antisense;
XX KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;
XX KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
XX KW HBV reverse transcriptase; Enhancer I region; viral replication;
XX KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
XX KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
XX KW virucide; antiinflammatory; substrate; ss.
XX
XX OS Hepatitis C virus.
XX
XX PN WO200281494-A1.
XX
XX PD 17-OCT-2002.
XX
XX PF 26-MAR-2002; 2002WO-US009187.
XX
XX PR 26-MAR-2001; 2001US-00817879.
XX PR 08-JUN-2001; 2001US-00877478.
XX PR 08-JUN-2001; 2001US-0296876P.
XX PR 24-OCT-2001; 2001US-0335059P.
XX PR 05-DEC-2001; 2001US-0337055P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX PA (BLAT/) BLATT L.
XX PA (MACE/) MACEJAK D.
XX PA (MCSW/) MCSWIGGEN J.
XX PA (MORR/) MORRISSEY D.
XX PA (PVC/) PAVCO P.
XX PA (LEEP/) LEE P.
XX
XX PA (DRAP/) DRAPER K.
XX PA (ROBE/) ROBERTS E.
XX
XX PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
XX PI Draper K, Roberts E;
XX XX WPI; 2003-229207/22.
XX
XX PT Novel compound useful for treating cirrhosis, liver failure,
XX PT hepatocellular carcinoma, or condition associated with hepatitis C virus
XX PT infection.
XX
XX PS Claim 1; Page 293; 387pp; English.
XX
XX CC The present invention relates to nucleic acid molecules which modulate
XX CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
XX CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
XX CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
XX CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
XX CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
XX CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
XX CC as oligonucleotides that specifically bind the Enhancer I region of HBV
XX CC DNA. The nucleic acids may be used to modulate the expression of HBV
XX CC genes and HBV viral replication. Also disclosed is a method for screening
XX CC compounds and/or potential therapies directed against HBV, and compounds
XX CC that modulate the expression and/or replication of HCV. The compounds and
XX CC methods of the invention are useful for the treatment of degenerative and
XX CC disease states related to HBV and HCV infection, replication and gene
XX CC expression such as cirrhosis, liver failure, and hepatocellular
XX CC carcinoma. The present sequence represents a substrate for one of the HCV
XX CC DNazyme or minus strand DNazyme sequences disclosed in the present
XX CC invention
XX
XX SQ Sequence 17 BP; 2 A; 3 C; 9 G; 0 T; 3 U; 0 Other;
XX
XX Query Match 0.6%; Score 12.8; DB 1; Length 17;
XX Best Local Similarity 87.5%; Pred. No. 4.2e+02;
XX Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
Qy 1086 AGGCTTCACCCACC 1101
Db 17 AGGCTCCACCCCATC 2
XX
XX RESULT 434
XX ACD62296/c
XX ID ACD62296 standard; RNA; 17 BP.
XX AC ACD62296;
XX
XX DT 23-SEP-2003 (first entry)
XX
XX DE HCV minus strand DNazyme substrate sequence #495.
XX
XX KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
XX KW RNA stability; RNA expression; RNA synthesis; antisense;
XX KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;
XX KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
XX KW HBV reverse transcriptase; Enhancer I region; viral replication;
XX KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
XX KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
XX KW virucide; antiinflammatory; substrate; ss.
XX
XX OS Hepatitis C virus.
XX
XX PN WO200281494-A1.
XX
XX PD 17-OCT-2002.
XX
XX PF 26-MAR-2002; 2002WO-US009187.
XX
XX PR 26-MAR-2001; 2001US-00817879.
XX PR 08-JUN-2001; 2001US-00877478.
XX

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PR 08-JUN-2001; 2001US-0296876P.
PR 24-OCT-2001; 2001US-0335059P.
PR 05-DEC-2001; 2001US-0337055P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MACE/) MACEJAK D.
PA (MCSW/) MCSWIGGEN J.
PA (MORR/) MORRISSEY D.
PA (PAVC/) PAVCO P.
PA (LEEP/) LEE P.
PA (DRAP/) DRAPER K.
PA (ROBE/) ROBERTS E.
XX
PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
PI Draper K, Roberts E;
XX
XX WPI; 2003-229207/22.
XX
XX Novel compound useful for treating cirrhosis, liver failure,
XX hepatocellular carcinoma, or condition associated with hepatitis C virus
XX infection.
XX
XX Claim 1; Page 283; 387pp; English.
XX
XX The present invention relates to nucleic acid molecules which modulate
XX the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
XX Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
XX and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
XX inozymes, zinzymes, ambersymes, and G-cleaver ribozymes. Also disclosed
XX are nucleic acid decoy molecules and aptamers that bind to HBV reverse
XX transcriptase and/or HBV reverse transcriptase primer sequences, as well
XX as oligonucleotides that specifically bind the Enhancer I region of HBV
XX DNA. The nucleic acids may be used to modulate the expression of HBV
XX genes and HBV viral replication. Also disclosed is a method for screening
XX compounds and/or potential therapies directed against HBV, and compounds
XX that modulate the expression and/or replication of HCV. The compounds and
XX methods of the invention are useful for the treatment of degenerative and
XX disease states related to HBV and HCV infection, replication and gene
XX expression such as cirrhosis, liver failure, and hepatocellular
XX carcinoma. The present sequence represents a substrate for one of the HCV
XX DNazyme or minus strand DNazyme sequences disclosed in the present
XX invention
XX
XX Sequence 17 BP; 4 A; 4 C; 7 G; 0 T; 2 U; 0 Other;
XX
XX Query Match 0.6%; Score 12.8; DB 1; Length 17;
XX Best Local Similarity 87.5%; Pred. No. 4.2e+02;
XX Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY 1117 GTGCCAGTTCACCT 1132
Db 16 GTGCCAGTTCACCT 1
XX
RESULT 435
ACD54753/C
ID ACD54753 standard; RNA; 17 BP.
XX
XX ACD54753;
XX
XX 24-SEP-2003 (first entry)
XX
XX HBV DNazyme substrate sequence #108.
XX
XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
XX RNA stability; RNA expression; RNA synthesis; antisense;
XX enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;
XX ambersyme; G-cleaver ribozyme; decoy molecule; aptamer;
XX HBV reverse transcriptase; Enhancer I region; viral replication;
XX degenerative; disease state; HBV infection; HCV infection; cirrhosis;
XX liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
XX virucide; antiinflammatory; substrate; ss.

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XX Hepatitis B virus.
XX
XX W0200281494-A1.
XX
XX 17-OCT-2002.
XX
XX 26-MAR-2002; 2002WO-US009187.
XX
XX 26-MAR-2001; 2001US-00817879.
XX 08-JUN-2001; 2001US-00877478.
XX 08-JUN-2001; 2001US-0296876P.
XX 24-OCT-2001; 2001US-0335059P.
XX 05-DEC-2001; 2001US-0337055P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX (BLAT/) BLATT L.
XX (MACE/) MACEJAK D.
XX (MCSW/) MCSWIGGEN J.
XX (MORR/) MORRISSEY D.
XX (PAVC/) PAVCO P.
XX (LEEP/) LEE P.
XX (DRAP/) DRAPER K.
XX (ROBE/) ROBERTS E.
XX
XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
XX Draper K, Roberts E;
XX
XX WPI; 2003-229207/22.
XX
XX Novel compound useful for treating cirrhosis, liver failure,
XX hepatocellular carcinoma, or condition associated with hepatitis C virus
XX infection.
XX
XX Example 1; Page 188; 387pp; English.
XX
XX The present invention relates to nucleic acid molecules which modulate
XX the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
XX Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
XX and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
XX inozymes, zinzymes, ambersymes, and G-cleaver ribozymes. Also disclosed
XX are nucleic acid decoy molecules and aptamers that bind to HBV reverse
XX transcriptase and/or HBV reverse transcriptase primer sequences, as well
XX as oligonucleotides that specifically bind the Enhancer I region of HBV
XX DNA. The nucleic acids may be used to modulate the expression of HBV
XX genes and HBV viral replication. Also disclosed is a method for screening
XX compounds and/or potential therapies directed against HBV, and compounds
XX that modulate the expression and/or replication of HCV. The compounds and
XX methods of the invention are useful for the treatment of degenerative and
XX disease states related to HBV and HCV infection, replication and gene
XX expression such as cirrhosis, liver failure, and hepatocellular
XX carcinoma. The present sequence represents a substrate for one of the HBV
XX ribozyme, inozyme, G-cleaver, zinzyme, DNazyme or ambersyme sequences
XX disclosed in the present invention
XX
XX Sequence 17 BP; 5 A; 2 C; 5 G; 0 T; 5 U; 0 Other;
XX
XX Query Match 0.6%; Score 12.8; DB 1; Length 17;
XX Best Local Similarity 87.5%; Pred. No. 4.2e+02;
XX Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY 1042 ACTACTAAGCCCTGG 1057
Db 17 ACTACTAATTCCTGG 2
XX
RESULT 436
ACCG4156
ID ACCG4156 standard; DNA; 17 BP.
XX
XX ACCG4156;
XX
XX 01-JUL-2003 (first entry)
XX

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XX Murine oligonucleotide associated with tumour suppression, SEQ ID 1403.  
DE Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;  
XX tumour suppression; tumour reversion; apoptosis; virus resistance;  
KW viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;  
KW schizophrenia; ss.  
XX Mus musculus.  
OS WO2003025176-A2.  
XX 27-MAR-2003.  
XX 17-SEP-2002; 2002WO-IB004210.  
XX 17-SEP-2001; 2001FR-00011979.  
XX (MOLE-) MOLECULAR ENGINES LAB.  
PA Telerman A, Amson R, Tuijnder M;  
XX WPI; 2003-333167/31.  
XX New isolated nucleic acid, useful for treating viral diseases associated  
XX with tumors and cell degeneration, also related polypeptides, antibodies  
XX and transfected cells.  
XX Disclosure; Page 195; 738pp; French.  
XX The present invention relates to murine oligonucleotides (ACC62754-  
XX ACC68806), which are associated with tumour suppression, tumour  
XX reversion, apoptosis and virus resistance. The oligonucleotides are  
XX useful as (1) as probes and primers for detecting, identifying,  
XX quantifying and/or amplifying nucleic acid, e.g. as one component of a  
XX gene chip; in vitro as (anti)sense reagents; and (2) for production of  
XX recombinant polypeptides. The oligonucleotides are useful for preparation  
XX of pharmaceuticals for prevention and/or treatment of viral diseases that  
XX are characterised by development of tumours or cell degeneration,  
XX specifically cancer but also Alzheimer's disease and schizophrenia  
XX Sequence 17 BP; 2 A; 9 C; 2 G; 4 T; 0 U; 0 Other;  
XX  
XX Query Match 0.6%; Score 12.8; DB 1; Length 17;  
XX Best Local Similarity 87.5%; Pred. No. 4.2e+02;  
XX Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
XX  
XX QY 1255 ATCCCCAACCCCTTC 1270  
XX 2 ATCCCCAGCCCTTC 17  
XX  
XX RESULT 437  
XX ADB98958/c  
XX ID ADB98958 standard; DNA; 17 BP.  
XX AC ADB98958;  
XX DT 04-DEC-2003 (first entry)  
XX DE LRP5 mutagenic PCR primer #77.  
XX Osteopathic; Gene therapy; High Bone Mass; HBM; LRP5; Zmax1; LRP6;  
XX bone mass modulation; osteoporosis; PCR; primer; ss.  
XX Synthetic.  
XX OS WO200292000-A2.  
XX PN 21-NOV-2002.  
XX PD 13-MAY-2002; 2002WO-US014877.  
XX PF

PR 11-MAY-2001; 2001US-0290071P.  
PR 17-MAY-2001; 2001US-0291311P.  
PR 01-FEB-2002; 2002US-0353058P.  
PR 04-MAR-2002; 2002US-0361293P.  
XX (GENO-) GENOME THERAPEUTICS CORP.  
XX (AMHP) WYETH.  
XX Allen K, Anisowicz A, Graham JR, Morales A, Yaworsky PJ, Liu W;  
XX WPI; 2003-129214/12.  
XX New nucleic acid comprising a mutation in LRP5 or LRP6, useful for  
XX diagnosing a HBM-like phenotype in a subject and for preparing a  
XX composition for modulating bone mass and/or lipid levels in a subject  
XX suffering from e.g. osteoporosis.  
XX Disclosure; Page 53; 629pp; English.  
XX The present invention relates to High Bone Mass (HBM), LRP5 (Zmax1) and  
XX LRP6 mutants, which results in a HBM-like phenotype when expressed in a  
XX cell. The HBM-like phenotype results in bone mass modulation and/or lipid  
XX level modulation. The invention is useful for diagnosing a HBM-like  
XX phenotype in a subject and for preparing a composition for modulating  
XX bone mass and/or lipid levels in a subject suffering from e.g.  
XX osteoporosis. The present sequence was used to illustrate the invention.  
XX Sequence 17 BP; 1 A; 1 C; 11 G; 4 T; 0 U; 0 Other;  
XX  
XX Query Match 0.6%; Score 12.8; DB 1; Length 17;  
XX Best Local Similarity 87.5%; Pred. No. 4.2e+02;  
XX Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
XX  
XX QY 1134 CACTCCAGCTCCACC 1149  
XX 17 CACTCCAGCCCCAAC 2  
XX  
XX RESULT 438  
XX ADB43905  
XX ID ADB43905 standard; DNA; 17 BP.  
XX AC ADB43905;  
XX DT 18-DEC-2003 (revised)  
XX DT 04-DEC-2003 (first entry)  
XX DE Tumour suppression/reversion associated nucleotide #4228.  
XX Cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;  
XX primer; probe; tumour suppression; tumour reversion; apoptosis;  
XX virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;  
XX diagnosis.  
XX OS Homo sapiens.  
XX PN WO2003040369-A2.  
XX PD 15-MAY-2003.  
XX PF 17-SEP-2002; 2002WO-IB004219.  
XX PR 17-SEP-2001; 2001FR-00011981.  
XX (MOLE-) MOLECULAR ENGINES LAB.  
XX Telerman A, Amson R, Tuijnder M;  
XX WPI; 2003-441574/41.  
XX New nucleic acid encoding human prostate membrane-specific antigen,  
XX useful e.g. for treatment of tumors and viral infection, also related  
XX polypeptide and antibodies.



CC or protein is useful as passive replacement therapy, as a vaccine, or in  
CC diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide  
CC spanning the sequence of the human NHEPL1 gene (ADC035:4).

XX SQ Sequence 17 BP; 4 A; 2 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.8; DB 1; Length 17;

Best Local Similarity 87.5%; Pred. No. 4.2e+02; Indels 0; Gaps 0;

Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 764 CAGGTTTCTTTCTAAG 779

Db 1 CAGGTTTCTTTCTAAG 16

RESULT 441

ADB44188/c

ID ADB44188 standard; DNA; 17 BP.

XX ADB44188;

XX 18-DEC-2003 (first entry)

XX Tumour suppression/reversion associated nucleotide #4511.

XX cytostatic; antiviral; neuroprotective; neurotropic; neuroleptic; ss;  
XX primer; probe; tumour suppression; tumour reversion; apoptosis;  
XX virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;  
XX diagnosis.

XX Homo sapiens.

XX WO2003040369-A2.

XX 15-MAY-2003.

XX 17-SEP-2002; 2002WO-1B004219.

XX 17-SEP-2001; 2001FR-00011981.

XX (MOLLE-) MOLECULAR ENGINES LAB.

XX Telerman A, Amson R, Tuijnder M;

XX WPI; 2003-441574/41.

XX New nucleic acid encoding human prostate membrane-specific antigen,  
XX useful e.g. for treatment of tumors and viral infection, also related  
XX polypeptide and antibodies.  
XX Disclosure; Page 559; 771pp; French.

XX The invention relates to the isolation of 6327 nucleotide sequences,  
XX fragments of at least 15 consecutive nucleotides of these nucleotides, a  
XX sequence having at least 80% identity, after optimal alignment, with the  
XX nucleotides, a sequence that hybridizes under stringent conditions with  
XX the nucleotides, or the complement, or corresponding RNA, of the  
XX nucleotides. The nucleotides are used as probes or primers for detecting,  
XX identifying, quantifying and/or amplifying nucleic acids, as in vitro  
XX sense and antisense sequences, of nucleotides involved in tumour  
XX suppression or reversion, apoptosis and/or viral resistance, to produce  
XX recombinant polypeptides, and to prepare transgenic animals, as  
XX experimental models. The nucleotides (also vectors containing them and  
XX cells containing the vectors), the encoded polypeptides and antibodies  
XX (Ab) against the polypeptide are useful for prevention and/or treatment  
XX of viral infections or diseases characterized by development of tumours  
XX or cell degeneration (e.g. Alzheimer's disease or schizophrenia).  
XX Analysis of the expression of the nucleotides can be used for diagnosis  
XX and/or prognosis of these diseases. The nucleotides and polypeptides can  
XX also be used to screen for their specific interactive molecules,  
XX potentially useful for treating diseases associated with abnormal  
XX expression of the nucleotides.

SQ Sequence 17 BP; 1 A; 3 C; 8 G; 5 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.8; DB 1; Length 17;

Best Local Similarity 87.5%; Pred. No. 4.2e+02; Indels 0; Gaps 0;

Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1290 CCACAGCCACAGC 1305

Db 16 CCACAGCCACAGATC 1

RESULT 442

AAQ74284/c

ID AAQ74284 standard; DNA; 18 BP.

XX AAQ74284;

XX 25-MAR-2003 (revised)

XX 12-JUN-1995 (first entry)

XX Amyloid precursor protein URA3 forward PCR primer.

XX Amyloid precursor protein; APP; URA3 PCR primer;

XX beta-amyloidosis animal models; Down's syndrome; Alzheimers disease;

XX yeast artificial chromosome; ss.

XX Synthetic.

XX WO9423049-A2.

XX 13-OCT-1994.

XX 01-APR-1994; 94WO-US003619.

XX 02-APR-1993; 93US-00042390.

XX (UYJO) UNIV JOHNS HOPKINS.

XX Gearhart JD, Lamb BT;

XX WPI; 1994-333207/41.

XX Introduction and expression of large genomic sequences in transgenic  
XX animals - which may be used as animal models of beta-amyloidosis in  
XX Alzheimer's disease and Down's syndrome.  
XX Example 3; Page 32; 60pp; English.

XX AAQ74284 and AAQ74285 are the forward and reverse PCR primers for the  
XX human amyloid precursor protein (APP) URA3, it was used to screen yeast  
XX artificial chromosome (YAC) libraries for APP. Isolated APP clones were  
XX then injected into blastocysts, from the same species as the embryonic  
XX cells which contained the YAC library. Transgenic animals which could be  
XX used as models of beta-amyloidosis (prevalent in individuals with Down's  
XX syndrome and Alzheimers disease), were then generated from the injected  
XX blastocysts. (Updated on 25-MAR-2003 to correct PN field.)

SQ Sequence 18 BP; 4 A; 3 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.8; DB 1; Length 18;

Best Local Similarity 87.5%; Pred. No. 5e+02; Indels 0; Gaps 0;

Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 739 CAGAACCCGTGTGCA 754

Db 18 CACACACCCGTGTGCA 3

RESULT 443

AAV12463/c

ID AAV12463 standard; DNA; 18 BP.

XX AAV12463;

XX AAV12463;



PT designing oligonucleotides which are useful for detecting M. kansasii  
 PT nucleic acid in clinical samples.

XX Claim 2; Page 11; 36pp; English.

XX This sequence is a primer for a Mycobacterium kansasii KATS2 sequence of  
 CC the invention. The KATS2 oligonucleotide is useful as a probe and a  
 CC primer for detection of M. kansasii microorganisms or nucleic acids in  
 CC veterinary and human clinical samples by hybridisation and amplification  
 CC respectively. The KATS2 fragment was hybridized to genomic DNA from M.  
 CC kansasii and non-M. kansasii species, and was found to hybridise to all  
 CC six M. kansasii strains tested, and none of the 17 non-M. kansasii  
 CC strains. The new oligonucleotides allows rapid, accurate and sensitive  
 CC identification of all strains of M. kansasii, compared to prior art  
 CC probes which only identify 73 % of M. kansasii strains (e.g. ACQU-PROBE),  
 CC or fail to detect one distinct M. kansasii subgroup (e.g. pMK1-9)

XX Sequence 18 BP; 4 A; 0 C; 9 G; 5 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.8; DB 1; Length 18;  
 Best Local Similarity 87.5%; Pred. No. 5e+02;  
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1134 CACCTCCAGCTCCACC 1149  
 || ||||| |||||  
 Db 16 CATCTCCATCTCCACC 1

RESULT 446

AAZ41037  
 ID AAZ41037 standard; DNA; 18 BP.

AC AAZ41037;

XX 26-JAN-2000 (first entry)

DE Cellular inhibitor of apoptosis-2 phosphorothioate antisense oligo #29.

XX Identification; genetic target; gene modulation; human; probe;  
 KW antisense oligonucleotide; phosphorothioate; PCR primer;  
 KW nucleotide sequence-based technology; antisense drug discovery;  
 KW target validation; ss.

XX Synthetic.

OS Homo sapiens.

OS WO9953101-A1.

PN 21-OCT-1999.

XX 13-APR-1999; 99WO-US008268.

XX 13-APR-1998; 98US-0081483P.

PR 28-APR-1998; 98US-00067638.

XX (ISIS-) ISIS PHARM INC.

XX Cowsert LM, Baker BF, Mcneil J, Freier SM, Sasmor HM, Brooks DG;

PI Ohasi C, Wyatt JR, Borchers AH, Vickers TA;

XX WPI; 1999-620446/53.

PT Identifying compounds which modulate expression of nucleic acids, used to  
 PT provide compounds having defined physical, chemical or bioactive  
 PT properties, e.g. antisense activity.

PS Example 21; Page 101; 264pp; English.

XX A method has been developed of defining a set of compounds that modulate  
 CC the expression of a target nucleic acid (tRNA) sequence via binding of the  
 CC compounds with the tRNA sequence. The method comprises generating a  
 CC library of virtual compounds in silico according to defined criteria, and  
 CC evaluating in silico the binding of the virtual compounds with the tNA

CC according to defined criteria. Also described are: (1) a method of  
 CC defining a set of oligonucleotides (ONs) that modulate the expression of  
 CC a tNA sequence via binding of the ONs with the tNA sequence comprising  
 CC generating a library of virtual compounds in silico according to defined  
 CC criteria, and evaluating in silico the binding of the virtual ONs with  
 CC the tNA according to defined criteria; and (2) a method of defining a set  
 CC of compounds that modulate the expression of a tNA sequence via binding  
 CC of the compounds with the tNA. The methods can be used for the generation  
 CC and identification of synthetic compounds having defined physical,  
 CC chemical or bioactive properties. Information gathered from assays of  
 CC such compounds is used to identify nucleic acid sequences that are  
 CC tractable to a variety of nucleotide sequence-based technologies, e.g.  
 CC antisense drug discovery and target validation. AAZ40852 to AAZ41220, and  
 CC AAY52701 to AAY52706, represent sequences used in the exemplification of  
 CC the present invention

XX Sequence 18 BP; 0 A; 9 C; 0 G; 9 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.8; DB 1; Length 18;  
 Best Local Similarity 87.5%; Pred. No. 5e+02;  
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 927 TTTATCCCTCCTCTTC 942  
 || ||||| |||||  
 Db 1 TTTCTCTCCTCTTC 16

RESULT 447

AAZ40886/C  
 ID AAZ40886 standard; DNA; 18 BP.

AC AAZ40886;

XX 26-JAN-2000 (first entry)

DE Human CD40 phosphorothioate antisense oligonucleotide SEQ ID NO:35.

XX Identification; genetic target; gene modulation; human; probe;  
 KW antisense oligonucleotide; phosphorothioate; PCR primer;  
 KW nucleotide sequence-based technology; antisense drug discovery;  
 KW target validation; ss.

XX Synthetic.

OS Homo sapiens.

OS WO9953101-A1.

PN 21-OCT-1999.

XX 13-APR-1999; 99WO-US008268.

XX 13-APR-1998; 98US-0081483P.

PR 28-APR-1998; 98US-00067638.

XX (ISIS-) ISIS PHARM INC.

XX Cowsert LM, Baker BF, Mcneil J, Freier SM, Sasmor HM, Brooks DG;

PI Ohasi C, Wyatt JR, Borchers AH, Vickers TA;

XX WPI; 1999-620446/53.

PT Identifying compounds which modulate expression of nucleic acids, used to  
 PT provide compounds having defined physical, chemical or bioactive  
 PT properties, e.g. antisense activity.

PS Example 8; Page 77; 264pp; English.

XX A method has been developed of defining a set of compounds that modulate  
 CC the expression of a target nucleic acid (tNA) sequence via binding of the  
 CC compounds with the tNA sequence. The method comprises generating a  
 CC library of virtual compounds in silico according to defined criteria, and  
 CC evaluating in silico the binding of the virtual compounds with the tNA  
 CC according to defined criteria. Also described are: (1) a method of

CC defining a set of oligonucleotides (ONs) that modulate the expression of  
 CC a tNA sequence via binding of the ONs with the tNA sequence comprising  
 CC generating a library of virtual compounds in silico according to defined  
 CC criteria, and evaluating in silico the binding of the virtual ONs with  
 CC the tNA according to defined criteria; and (2) a method of defining a set  
 CC of compounds that modulate the expression of a tNA sequence via binding  
 CC and identification of synthetic compounds having defined physical,  
 CC chemical or bioactive properties. Information gathered from assays of  
 CC such compounds is used to identify nucleic acid sequences that are  
 CC tractable to a variety of nucleotide sequence-based technologies, e.g.  
 CC antisense drug discovery and target validation. AAZ40852 to AAZ41220, and  
 CC AAY52701 to AAY52706, represent sequences used in the exemplification of  
 CC the present invention

SQ Sequence 18 BP; 4 A; 3 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.8; DB 1; Length 18;  
 Best Local Similarity 87.5%; Pred. No. 5e+02;  
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 743 ACACCGTGTGCACCTG 758  
 Db 17 ACACCACTGCACCTG 2

RESULT 448  
 AAZ31867  
 ID AAZ31867 standard; DNA; 18 BP.

XX AAZ31867;

DT 24-JAN-2000 (first entry)

DE Human G-alpha-13 antisense inhibitor ISIS# 20774.

KW G-alpha-13; human; inhibitor; cancer; antisense compound; therapy; ss.

OS Synthetic.

OS Homo sapiens.

PN US5981732-A.

PD 09-NOV-1999.

PF 04-DEC-1998; 98US-00205860.

PR 04-DEC-1998; 98US-00205860.

PA (ISIS-) ISIS PHARM INC.

XX Cowsert LM;

XX WPI; 1999-633376/54.

XX Antisense compound inhibiting expression of human G-alpha-13.

PS Example 15; Col 39; 38pp; English.

XX This sequence represents an antisense inhibitor of the invention, and  
 CC inhibits the expression of the human G-alpha-13 protein. The antisense  
 CC compounds of the invention are of 8 to 30 nucleobases in length, that  
 CC inhibits the expression of the human G-alpha-13. The antisense compound  
 CC is useful for treating an animal, particularly humans, having or being  
 CC prone to a disease or condition associated with the expression of G-alpha  
 CC -13, such as cancer

SQ Sequence 18 BP; 8 A; 3 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.8; DB 1; Length 18;  
 Best Local Similarity 87.5%; Pred. No. 5e+02;  
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 806 ACTGTAAGAAAGCCT 821  
 Db 3 ATTGTAAGAAAGCCT 18

RESULT 449

ID AAZ22131 standard; DNA; 18 BP.

XX AAZ22131;

DT 26-NOV-1999 (first entry)

DE Human c-IAP-2 mRNA inhibiting antisense oligo ISIS #23440.

KW Cellular Inhibitor of Apoptosis-2; antisense; diagnostic; therapeutic;  
 KW c-IAP-2; prophylaxis; infection; inflammation; tumor formation; ss.

OS Synthetic.

OS Homo sapiens.

PN US5958771-A.

PD 28-SEP-1999.

PF 03-DEC-1998; 98US-00205144.

PR 03-DEC-1998; 98US-00205144.

PA (ISIS-) ISIS PHARM INC.

XX Bennett CF, Cowsert LM, Ackermann EJ;

XX WPI; 1999-561046/47.

XX Antisense compounds complementary to Cellular Inhibitor of Apoptosis-2  
 XX useful for e.g. diagnostics, therapeutics, and as research reagents.

PS Example 15; Col 39; 33pp; English.

XX The invention provides antisense compounds of 8-30 nucleotides that  
 CC inhibit the expression of human Cellular Inhibitor of Apoptosis-2 (c-IAP-  
 CC 2). The antisense compounds may be used for diagnostics, therapeutics  
 CC (for modulating the expression of c-IAP-2), prophylaxis (e.g. to prevent  
 CC or delay infection, inflammation, or tumor formation), as research  
 CC reagents (e.g. to distinguish between members of a biological pathway)  
 CC and in kits. Sequences AAZ22103-142 represent phosphorothioate  
 CC oligonucleotides used for antisense inhibition of cellular inhibitor of  
 CC apoptosis-2

XX Sequence 18 BP; 0 A; 9 C; 0 G; 9 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.8; DB 1; Length 18;  
 Best Local Similarity 87.5%; Pred. No. 5e+02;  
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 927 TTTATCCCTCCTCTTC 942  
 Db 1 TTTCTCTCTCCTCTTC 16

RESULT 450

ID AAZ47719/c

XX AAZ47719 standard; DNA; 18 BP.

XX AAZ47719;

DT 02-MAR-2000 (first entry)

DE Human CD40 antisense oligonucleotide SEQ ID NO:35.

KW Human; CD40; antisense oligonucleotide; phosphorothioate; modulation;  
 KW expression; immune disease; inflammatory disease; immunomodulatory;



KW anti-inflammatory; anti-arthritis; anti-asthmatic; antiproliferative;  
 KW anticancer; immuno-suppressive; anti-psoriatic; allograft rejection;  
 KW hyperproliferative disease; autoimmune disease; rheumatoid arthritis;  
 KW inflammatory bowel disease; asthma; psoriasis; cancer; tumour; ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 XX  
 PN WO9957320-A1.  
 XX  
 PD 11-NOV-1999.  
 XX  
 XX  
 XX PF 22-APR-1999; 99WO-US008765.  
 XX  
 XX PR 01-MAY-1998; 98US-00071433.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 XX Bennett CF, Cowser LM;  
 XX WPI; 2000-062158/05.  
 DR  
 XX  
 XX  
 PT Antisense molecules directed against nucleic acid encoding human CD40,  
 PT for treating e.g. immune, inflammatory or hyperproliferative diseases.  
 XX  
 XX Claim 3; Page 44; 102pp; English.  
 XX  
 CC AAZ47768 to AAZ47769 represent phosphorothioate antisense  
 CC oligonucleotides targeted to human CD40, which can be used to inhibit the  
 CC expression of human CD40. CD40 is involved in lymphocyte activation,  
 CC tumour growth and/or angiogenesis. Inhibition of CD40 is used to treat or  
 CC prevent immune-associated diseases (specifically guest vs. host disease,  
 CC allograft rejection or autoimmune diseases); inflammation (specifically  
 CC asthma, rheumatoid arthritis, allograft rejection, inflammatory bowel  
 CC disease or psoriasis) or hyperproliferation (specifically cancer and  
 CC tumours). The antisense oligonucleotides are also useful as diagnostic  
 CC and research reagents. AAZ47769 represents the human CD40 nucleotide  
 CC sequence. AAZ47770 to AAZ47772 represent human CD40 forward and reverse  
 CC PCR primers, and a human CD40 PCR probe, respectively. AAZ47773 to  
 CC AAZ47775 represent other PCR primers and a probe used in the  
 CC exemplification of the present invention  
 XX  
 XX Sequence 18 BP; 4 A; 3 C; 7 G; 4 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.6%; Score 12.8; DB 1; Length 18;  
 Best Local Similarity 87.5%; Pred. No. 5e+02;  
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 743 ACACCGGTGCACCTG 758  
 Db ||||| ||||| |||||  
 17 ACACCATCTGCACCTG 2  
 RESULT 451  
 AAZ75429/c  
 ID AAZ75429 standard; DNA; 18 BP.  
 XX  
 AC AAZ75429;  
 XX  
 XX  
 DT 10-SEP-2001 (first entry)  
 XX  
 XX Human biallelic marker downstream amplification primer SEQ ID NO:9785.  
 DE  
 XX  
 XX Human genome; biallelic marker; high density disequilibrium map;  
 KW genomic map; haplotype; phenotype; polymorphic base; genotyping;  
 KW haplotyping; hybridisation; identification; characterisation;  
 KW amplification; single nucleotide polymorphism; SNP; PCR primer;  
 KW diagnosis; ss.  
 XX  
 XX Homo sapiens.  
 OS  
 XX WO9954500-A2.  
 PN  
 XX

PD 28-OCT-1999.  
 XX  
 PF 21-APR-1999; 99WO-IB000822.  
 XX  
 PR 21-APR-1998; 98US-0082614P.  
 PR 23-NOV-1998; 98US-0109732P.  
 XX  
 XX (GEST ) GENSET.  
 XX  
 XX Cohen D, Blumenfeld M, Chumakov I;  
 XX WPI; 2000-013267/01.  
 DR  
 XX  
 PT Novel biallelic markers used to construct a high density disequilibrium  
 PT map of the human genome.  
 XX  
 XX Claim 8; Page 2317; 2745pp; English.  
 XX  
 CC AAZ65654 to AAZ69578 represent human biallelic markers from the present  
 CC invention, which contain a polymorphic base at position 24 of their  
 CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification  
 CC primers for the biallelic markers. The biallelic markers of the invention  
 CC have a variety of uses: they can be used for high density mapping of the  
 CC human genome, and in complex association studies and haplotyping studies  
 CC which are useful in determining the genetic basis for disease states.  
 CC Compositions and methods of the invention can also be useful for the  
 CC identification of the targets for the development of pharmaceutical  
 CC agents and diagnostic methods, as well as the characterisation of the  
 CC differential efficacious responses to and side effects from  
 CC pharmaceutical agents acting on a disease as well as other treatment.  
 CC N.B. The SEQ ID Nos 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and  
 CC 3367, are not actually given a sequence in the Sequence Listing from the  
 CC present invention  
 XX  
 XX Sequence 18 BP; 5 A; 2 C; 7 G; 4 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.6%; Score 12.8; DB 1; Length 18;  
 Best Local Similarity 87.5%; Pred. No. 5e+02;  
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1138 TCCAGCTCCACCTATA 1153  
 Db ||||| ||||| |||||  
 17 TCCAACTCCACCTTTA 2  
 RESULT 452  
 AAZ69900/c  
 ID AAZ69900 standard; DNA; 18 BP.  
 XX  
 AC AAZ69900;  
 XX  
 XX  
 DT 10-SEP-2001 (first entry)  
 XX  
 XX Human biallelic marker upstream amplification primer SEQ ID NO:4256.  
 DE  
 XX  
 XX Human genome; biallelic marker; high density disequilibrium map;  
 KW genomic map; haplotype; phenotype; polymorphic base; genotyping;  
 KW haplotyping; hybridisation; identification; characterisation;  
 KW amplification; single nucleotide polymorphism; SNP; PCR primer;  
 KW diagnosis; ss.  
 XX  
 XX Homo sapiens.  
 OS  
 XX WO9954500-A2.  
 PN  
 XX 28-OCT-1999.  
 PD  
 XX  
 XX 21-APR-1999; 99WO-IB000822.  
 PF  
 XX 21-APR-1998; 98US-0082614P.  
 PR  
 XX 23-NOV-1998; 98US-0109732P.  
 PR  
 XX (GEST ) GENSET.  
 PA

XX PI Cohen D, Blumenfeld M, Chumakov I;  
 XX WPI; 2000-013267/01.  
 XX Novel biallelic markers used to construct a high density disequilibrium  
 XX map of the human genome.  
 XX Claim 8; Page 1138; 2745pp; English.  
 XX AA265654 to AA269578 represent human biallelic markers from the present  
 XX invention, which contain a polymorphic base at position 24 of their  
 XX nucleotide sequences. AA269579 to AA277440 represent amplification  
 XX primers for the biallelic markers. The biallelic markers of the invention  
 XX have a variety of uses: they can be used for high density mapping of the  
 XX human genome, and in complex association studies and haplotyping studies  
 XX which are useful in determining the genetic basis for disease states.  
 XX Compositions and methods of the invention can also be useful for the  
 XX identification of the targets for the development of pharmaceutical  
 XX agents and diagnostic methods, as well as the characterization of the  
 XX differential efficacious responses to and side effects from  
 XX pharmaceutical agents acting on a disease as well as other treatment.  
 XX N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and  
 XX 3367, are not actually given a sequence in the Sequence Listing from the  
 XX present invention  
 XX SQ Sequence 18 BP; 3 A; 2 C; 7 G; 6 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 12.8; DB 1; Length 18;  
 Best Local Similarity 87.5%; Pred. NO. 5e+02; Mismatches 0; Indels 0; Gaps 0;  
 Matches 14; Conservative 0;  
 OY 1078 CCCACTCCAGGCTTCA 1093  
 DB 17 CCCATCAAGGCTTCA 2  
 RESULT 453  
 AAA37653/C  
 ID AAA37653 standard; DNA; 18 BP.  
 AC AAA37653;  
 XX 24-OCT-2000 (first entry)  
 XX PCR primer PFX52U for FMR1 gene.  
 XX PCR primer; FMR1 gene; fragile XA related allele; GC rich region; FRAXA;  
 KW diagnosis; trinucleotide repeat; Fragile XA syndrome; FRAXE-MR; SMDA;  
 KW spinal and bulbar muscular atrophy; myotonic dystrophy; DRAPUA; SCAL;  
 KW Huntington's disease; DM; HD; spinocerebellar ataxia type 1;  
 KW fragile XE mental retardation; dentatorubral pallidolysian atrophy; ss.  
 XX Homo sapiens.  
 XX WO200043531-A2.  
 XX 27-JUL-2000.  
 XX 24-JAN-2000; 2000WO-US001475.  
 XX 25-JAN-1999; 99US-00236097.  
 XX (GAMI-) GAMI DA GEN LTD.  
 PA (FRIE/) FRIEDMAN M M.  
 XX Navot N, Lederkremer M;  
 XX WPI; 2000-482916/42.  
 XX Characterizing GC rich regions of a nucleic acid comprising modifying GC  
 PT residues into residues complementary to A or T, and amplifying the  
 PT modified product, useful for diagnosing trinucleotide repeats.

XX Example 4; Page 45; 47pp; English.  
 XX This sequence represents a PCR primer for the FMR1 gene. This sequence  
 CC was used to amplify Fragile XA related alleles from the FMR1 gene. The  
 CC invention relates to a method for characterising a GC rich region of a  
 CC nucleic acid comprising contacting the nucleic acid with an agent that  
 CC modifies C or G into residues complementary to A or T, amplifying (at  
 CC least part of) the resultant modified nucleic acid, and determining the  
 CC size of the amplification product. The methods and kits for carrying out  
 CC the methods are useful for characterising GC rich nucleic acids. This is  
 CC particularly useful for diagnosing trinucleotide repeats associated with  
 CC Fragile XA syndrome (FRAXA), spinal and bulbar muscular atrophy (SMDA),  
 CC myotonic dystrophy (DM), Huntington's disease (HD), spinocerebellar  
 CC ataxia type 1 (SCA1), fragile XE mental retardation (FRAXE-MR) and  
 CC dentatorubral pallidolysian atrophy (DRAPUA). Current methods of nucleic  
 CC acid sequencing are hampered by the formation of stable secondary  
 CC structures in GC rich regions which hamper the sequential incorporation  
 CC of nucleotides to a growing duplexed chain  
 XX SQ Sequence 18 BP; 2 A; 0 C; 10 G; 6 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 12.8; DB 1; Length 18;  
 Best Local Similarity 87.5%; Pred. NO. 5e+02; Mismatches 0; Indels 0; Gaps 0;  
 Matches 14; Conservative 0;  
 OY 1134 CACCTCCAGCTCCACC 1149  
 DB 17 CACCTCCATCACCACC 2  
 RESULT 454  
 AAF74788/C  
 ID AAF74788 standard; DNA; 18 BP.  
 XX AAF74788;  
 XX 17-MAY-2001 (first entry)  
 XX Midkine PCR primer SEQ ID NO:12.  
 XX WAR-1; protein screening; endoplasmic reticulum membrane protein;  
 KW endoplasmic reticulum membrane transportation; secretory protein;  
 KW cell membrane protein; cytosolic; CNS active; antiallergic; cancer;  
 KW antirheumatic; nervous system disorder; immune disorder; allergy;  
 KW rheumatism; skeletal disorder; PCR primer; ss.  
 XX Homo sapiens.  
 XX WO2000114582-A1.  
 XX 01-MAR-2001.  
 XX 17-AUG-2000; 2000WO-JP005488.  
 XX 20-AUG-1999; 99JP-00234764.  
 XX (SUMU) SUMITOMO PHARM CO LTD.  
 XX Tohdoh N, Okuyama H, Imamura M, Ishikawa H, Nemoto K;  
 XX WPI; 2001-202940/20.  
 XX Transformation of a cell with separate vectors expressing the sense and  
 PT antisense strands of WAR-1 DNA for screening secretory and membrane  
 PT proteins expressed by the cell.  
 XX Example 3; Page 28; 79pp; Japanese.  
 CC The present invention describes a screening method for secretory and  
 CC membrane proteins consisting of transformation of a cell with separate  
 CC expression vectors for the sense and antisense RNA of DNA encoding an  
 CC endoplasmic reticulum membrane protein participating in endoplasmic

CC reticulum transport of proteins. Also described are: (1) secretory and  
 CC cell membrane proteins identified by the screening method; (2) drug  
 CC compositions containing these proteins; (3) host cells transformed by the  
 CC separate expression vectors of the method; and (4) the preparation of  
 CC secretory and cell membrane proteins by culture of the transformants. The  
 CC method can be used for the identification and preparation of proteins for  
 CC use in the treatment and prevention of diseases such as cancer, disorders  
 CC of the nervous system, immune disorders (including allergies and  
 CC rheumatism) and skeletal disorders. The present sequence represents a PCR  
 CC primer, which is used in an example from the present invention  
 XX  
 SQ Sequence 18 BP; 3 A; 6 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.8; DB 1; Length 18;

Best Local Similarity 87.5%; Pred. No. 5e+02;

Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 876 CTCGAGCACCACAGTG 891

Db ||||| ||||| |||||  
 17 CTCGGGACACAGTG 2

RESULT 455

AAD25547

ID AAD25547 standard; DNA; 18 BP.

XX

AC AAD25547;

XX

DT 26-MAR-2002 (first entry)

XX

DE Human IGFBP-3 interacting protein, P4.33-specific antisense oligo #14.

XX

KW Human; insulin-like growth factor binding protein-3; IGFBP-3; cytostatic;  
 KW lung; cervical; breast; colon; cancer; prostate carcinoma; P4.33 protein;  
 KW gene therapy; cellular proliferation; apoptosis; receptor; antisense; ss.

XX

OS Homo sapiens.

XX

PN W02001.87238-A2.

XX

PD 22-NOV-2001.

XX

PF 17-MAY-2001; 2001WO-US016437.

XX

PR 17-MAY-2000; 2000US-0204949P.

XX

PA (UYOR-) UNIV OREGON HEALTH SCI.

XX

PI Oh Y, Rosenfeld R, Ingermann AR;

XX

DR WPI; 2002-082938/11.

XX

PT Novel insulin-like growth factor binding protein-3 interacting protein,  
 PT termed P4.33 for identifying compounds having anti-cancer activity,  
 PT inducing apoptosis and inhibiting cellular proliferation in cancer cells.

XX

PS Claim 47; Page 19; 109pp; English.

XX

CC The present invention relates to an isolated DNA sequence encoding a  
 CC insulin-like growth factor binding protein-3 (IGFBP-3) interacting  
 CC protein, termed P4.33 protein. IGFBP-3 is used in gene therapy. Antibody  
 CC specific for P4.33 is useful in an assay for cancer treatment, prognosis,  
 CC or diagnosis in a patient for cancer cells that express P4.33 protein or  
 CC peptides, by determining the amount of P4.33 protein or peptides in  
 CC blood, serum, urine, lymph, saliva, tumour tissue, placental tissue,  
 CC umbilical cord tissue, amniotic fluid, chorionic villi tissue or their  
 CC combinations, by enzyme linked immunosorbent assay (ELISA), Western  
 CC analysis, immunoprecipitation or immunohistochemistry. Detecting  
 CC P4.33 specific sequences in a bodily fluid sample from a patient is also  
 CC useful in an assay for cancer treatment, prognosis, or diagnosis in a  
 CC patient for cancer cells that express P4.33-specific sequences, by  
 CC performing a sequence identity assay such as ELISA immunologic assays,  
 CC PCR assays, hybridisation assays and their combinations to detect P4.33-

CC specific sequences. P4.33 is useful for preventing or treating cancer,  
 CC including lung, cervical, breast, colon or prostate carcinoma in a  
 CC patient. P4.33 functions as a receptor for IGFBP-3 and is involved in the  
 CC inhibition of DNA synthesis and cellular proliferation and in the  
 CC induction of apoptosis in cancer cells. The present sequence is human  
 CC P4.33-specific antisense oligonucleotide

SQ Sequence 18 BP; 4 A; 5 C; 8 G; 1 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.8; DB 1; Length 18;

Best Local Similarity 87.5%; Pred. No. 5e+02;

Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 752 GCACCTGCCATGCAGG 767

Db ||||| ||||| |||||  
 2 GCACCTGCCAGGAGG 17

RESULT 456

ABK88473/c

ID ABK88473 standard; DNA; 18 BP.

XX

AC ABK88473;

XX

DT 07-OCT-2002 (first entry)

XX

DE Human HP4 prostaglandin receptor RT-PCR primer #2.

XX

KW Human; ss; PCR; HP4; human placental clone number 4; EP2; primer;

KW prostaglandin receptor; antiasthmatic; antiinflammatory;

KW bronchopulmonary inflammation; asthma; inflammation;

KW antisense gene therapy; reverse transcriptase PCR.

XX

OS Homo sapiens.

XX

PN US6395878-B1.

XX

PD 28-MAY-2002.

XX

PF 12-MAR-1999; 99US-00267423.

XX

PR 05-MAY-1994; 94US-00239431.

XX

PR 05-FEB-1998; 98US-00019393.

XX

PA (ALLR ) ALLERGAN SALES INC.

XX

PI Regan JW, Gil DW, Woodward DF;

XX

DR WPI; 2002-572852/61.

XX

PT New full length human prostaglandin human placental clone member 4

PT polypeptide useful in the development of treatments for bronchopulmonary

PT inflammation and asthma, and for regulating inflammation.

XX

PS Claim 12; Col 10; 16pp; English.

XX

CC The invention relates to an isolated polypeptide comprising a full length  
 CC human prostaglandin (human placental clone number 4) HP4 receptor, where  
 CC the amino acid sequence of the receptor is encoded by nucleotide sequence  
 CC contained within an open reading frame of plasmid HS/HP4, American Type  
 CC Culture Collection (ATCC) accession number 97472. Also included are a  
 CC polypeptide comprising a fragment of HP4, where the fragment comprises an  
 CC amino acid sequence encoded by 18 consecutive nucleotides of a nucleotide  
 CC sequence region flanked by primers of appearing as ABK88470 and ABK88471  
 CC and the fragment binds an anti-HP4 antibody, and a composition comprising  
 CC the isolated fragment of the human prostaglandin HP4 receptor. The HP4  
 CC receptor (which has prostaglandin EP2 receptor pharmacological activity)  
 CC is useful for determining the specific processes mediated by HP4 receptor  
 CC and in the development of treatments for bronchopulmonary inflammation  
 CC and asthma, and in regulating inflammation. HP4 is also useful for  
 CC identifying compounds for utilising as therapeutic agents. HP4 is useful  
 CC in binding assays in particular for identifying HP4 receptor agonist and  
 CC antagonist. The HP4 fragment is useful in in situ hybridisation and for

CC generating antibodies against HP4 receptor epitopes that allows  
 CC immunohisto-chemical localisation of the protein in cells, tissues, and  
 CC body fluids, and thus identifying a cell expressing the HP4 receptor  
 CC subtype. A composition comprising a fragment of HP4 polynucleotide is  
 CC useful for decreasing or preventing translation of human HP4  
 CC prostaglandin receptor (i.e. antisense gene therapy). The present  
 CC sequence is a reverse transcriptase (RT)-PCR primer used to amplify a  
 CC region of the HP4 prostaglandin receptor mRNA corresponding to the second  
 CC extracellular loop and seventh transmembrane domain  
 SQ Sequence 18 BP; 7 A; 4 C; 6 G; 1 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 12.8; DB 1; Length 18;  
 Best Local Similarity 87.5%; Pred. No. 5e+02; Indels 0; Gaps 0;  
 Matches 14; Conservative 0; Mismatches 2;  
 Qy 912 CTTGGGCTTTGGCTT 927  
 Db 17 CTTGGGCTTTGGCAT 2

RESULT 457  
 ABAK15756/C  
 ID ABAK15756 standard; DNA; 18 BP.  
 AC ABAK15756;  
 XX  
 DT 08-MAY-2002 (first entry)  
 DE Prostaglandin receptor EP2 antisense PCR primer DNA sequence.  
 KW Human; cyclooxygenase-2; COX-2; PCR; primer; sepsis; pancreatitis; burn;  
 KW trauma; blood loss; penetrating injury; septic shock; pneumonia;  
 KW septicemia; bacteremia; urinary tract infection; wound infection;  
 KW drug reaction; systemic inflammatory response syndrome; PGE<sub>2</sub>;  
 KW prostaglandin E<sub>2</sub>; receptor; BP2; ss.  
 XX Homo sapiens.  
 OS  
 XX US2002006915-A1.  
 EN  
 PD 17-JAN-2002.  
 XX  
 PF 14-FEB-2001; 2001US-00782936.  
 XX  
 PR 15-FEB-2000; 2000US-0182524P.  
 XX  
 PA (STRO/) MACK STRONG V E.  
 PA (STAP/) STAPLETON P P.  
 PA (DALY/) DALY J M.  
 XX  
 PI Mack Strong VE, Stapleton PP, Daly JM;  
 XX WPI; 2002-179019/23.  
 DR  
 XX  
 PT Treating a patient at risk for systemic inflammatory response syndrome  
 PT e.g. trauma involves administering cyclooxygenase-2 inhibitor or a drug.  
 XX  
 PS Example 5; Page 10; 39pp; English.  
 XX  
 CC The present invention relates to a new method of treating a patient at  
 CC risk for systemic inflammatory response syndrome. The method involves  
 CC administering a selective cyclooxygenase-2 inhibitor or a drug which  
 CC stimulates at least one prostaglandin E<sub>2</sub> (PGE<sub>2</sub>) receptor or a drug  
 CC which interferes with binding of PGE<sub>2</sub> to at least one of PGE<sub>2</sub>  
 CC receptors. The invention can be used for treating a patient at risk for  
 CC systemic inflammatory response syndrome e.g. sepsis, pancreatitis, burns,  
 CC trauma, life threatening blood loss from penetrating injury, or a patient  
 CC who has undergone surgery, septic shock, infections such as pneumonia,  
 CC septicemia, bacteraemia, urinary tract infection, wound infection or  
 CC drug reaction and can also be used for beneficial immune modulation. The  
 CC inhibitor or the drugs selectively modulate the immune response after  
 CC trauma, reduce the incidence of infectious complications and improve

CC survival after traumatic injury. The present nucleic acid sequence  
 CC represents the human prostaglandin receptor EP2 antisense PCR primer that  
 CC was used in the invention with the EP2 sense PCR primer (ABK15755) for  
 CC peripheral blood mononuclear cell RNA preparation  
 XX  
 SQ Sequence 18 BP; 7 A; 4 C; 6 G; 1 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 12.8; DB 1; Length 18;  
 Best Local Similarity 87.5%; Pred. No. 5e+02; Indels 0; Gaps 0;  
 Matches 14; Conservative 0; Mismatches 2;  
 Qy 912 CTTGGGCTTTGGCTT 927  
 Db 17 CTTGGGCTTTGGCAT 2

RESULT 458  
 ABA05926  
 ID ABA05926 standard; DNA; 18 BP.  
 AC ABA05926;  
 XX  
 DT 05-MAR-2002 (first entry)  
 DE Escherichia coli ygbp PCR primer SEQ ID NO 7.  
 KW Escherichia coli; ygbp; CDP-ME synthase; protein coordinate data;  
 KW 4-diphosphocytidyl-2-C-methylerythritol synthase; terpenoid; infection;  
 KW non-mevalonate isoprenoid; biosynthesis pathway; antibacterial; tetanus;  
 KW antidiarrheic; antiinflammatory; tuberculostatic; Streptococcus; anthrax;  
 KW toxic shock syndrome; meningitis; gonorrhea; gastroenteritis; PCR primer;  
 KW ss.  
 XX Escherichia coli.  
 OS  
 XX WO200183769-A2.  
 EN  
 XX 08-NOV-2001.  
 PD  
 XX 03-MAY-2001; 2001WO-US014371.  
 PF  
 XX 03-MAY-2000; 2000US-0201589P.  
 PR  
 XX 12-DEC-2000; 2000US-0255088P.  
 XX  
 PA (SALK ) SALK INST BIOLOGICAL STUDIES.  
 XX  
 PI Noel JP, Bowman ME, Richard S;  
 XX WPI; 2002-089742/12.  
 DR  
 XX  
 PT Composition, useful for treating bacterial infections and for identifying  
 PT modulator compounds, comprise crystalline 4-diphosphocytidyl-2-C-  
 PT methylerythritol synthase.  
 XX  
 PS Example 2; Page 36; 176pp; English.  
 XX  
 CC The invention relates to a composition (I) comprising CDP-ME, 4-  
 CC diphosphocytidyl-2-C-methylerythritol synthase in crystalline form. The  
 CC invention also discloses screening for compounds (II) that inhibit the  
 CC non-mevalonate isoprenoid biosynthesis pathway. (II) has antibacterial,  
 CC antidiarrheic, antiinflammatory and tuberculostatic activity. (II) is  
 CC useful for inhibiting in vitro or in vivo, the activity of one or more  
 CC enzymes in the non-mevalonate isoprenoid biosynthesis pathway, in a cell  
 CC or cell-free environment, and thus modulating the growth of a cell e.g.  
 CC bacterial cell. (II) is also useful for inhibiting bacterial terpenoid  
 CC synthesis and treating a subject suffering from a bacterial infection  
 CC e.g. infection by Streptococcus or Escherichia coli. (II) is also useful  
 CC for treating disorders caused by bacterial infections, including  
 CC diarrhoea, pneumonia, dysentery, anthrax, rheumatic fever, toxic shock  
 CC syndrome, mastitis, meningitis, gonorrhea, typhoid fever,  
 CC gastroenteritis, brucellosis, cholera, bubonic plague, tetanus,  
 CC tuberculosis and Lyme disease. The present sequence is that of a PCR  
 CC primer for expression of the E. coli ygbp gene encoding CDP-ME synthase

XX SQ Sequence 18 BP; 5 A; 7 C; 5 G; 1 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 12.8; DB 1; Length 18;  
 Best Local Similarity 87.5%; Pred. No. 5e+02;  
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 735 GAACAGACACACCGTG 750  
 DB 3 GAACAGACACACCGTG 18

RESULT 459  
 ABS57306/c  
 ID ABS57306 standard; DNA; 18 BP.  
 XX AC  
 AC ABS57306;  
 XX DT 31-JAN-2003 (first entry)  
 XX DE PCR primer #2 for DNA encoding human placental clone number 4 (HP4).  
 XX KW Human; EP prostaglandin receptor; human placental clone number 4; HP4;  
 KW adenylyate cyclase; chronic asthma; immunosuppression; antiasthmatic; PCR;  
 KW primer; ss.  
 XX OS Homo sapiens.  
 XX PN US2002128445-A1.  
 XX PD 12-SEP-2002.  
 XX PF 28-MAR-2002; 2002US-00108714.  
 XX PR 05-MAY-1994; 94US-00239431.  
 PR 05-FEB-1998; 98US-00019393.  
 PR 12-MAR-1999; 99US-00267423.  
 XX (UYAR-) UNIV ARIZONA STATE.  
 XX Regan JW, Gil DW, Woodward DF;  
 WPI; 2003-066913/06.  
 Novel isolated human prostaglandin HP4 receptor polypeptide encoded by  
 plasmid KS/HP4, useful to stimulate adenylyate cyclase activity in  
 response to prostaglandins or to raise antibodies against HP4 receptor  
 epitopes.  
 Example 6; Page 5; 12pp; English.

XX The present invention relates to a gene encoding a novel human EP  
 prostaglandin receptor, referred to as human placental clone number 4  
 (HP4). Also described is a vector, KS/HP4 (pBluescript HP4 clone), used  
 for the expression of HP4 in eukaryotic cells. The HP4 receptor, when  
 expressed in eukaryotic cells, is capable of binding prostaglandins and  
 their analogues, and stimulating adenylyate cyclase activity in response  
 to prostaglandins. The HP4 receptor is useful for studying the  
 pharmacology, cellular distribution, and expression of the HP4 receptor.  
 It is also useful as an antigen to raise antibodies against HP4 receptor  
 epitopes, in binding assays for identifying HP4 receptor agonists and  
 antagonists, and for screening compounds able to bind to the  
 prostaglandin HP4 receptor. A composition comprising an antisense agent  
 able to inhibit or prevent translation of the HP4 receptor in vivo is  
 useful for attenuating the effects of endogenous HP4 receptor agonists in  
 patients having conditions such as chronic asthma or immunosuppression,  
 and for treating the above conditions. The present sequence represents a  
 PCR primer for DNA encoding HP4

XX SQ Sequence 18 BP; 7 A; 4 C; 6 G; 1 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 12.8; DB 1; Length 18;  
 Best Local Similarity 87.5%; Pred. No. 5e+02;

Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1242 CGCTCCGACCCATC 1257  
 DB 3 CGCTCCGACCCATC 18

RESULT 460  
 ACF62995  
 ID ACF62995 standard; DNA; 18 BP.  
 XX AC  
 AC ACF62995;  
 XX DT 09-OCT-2003 (first entry)  
 XX DE Human p16 PCR primer SEQ ID NO:244.  
 XX KW Human; colon cancer; oestrogen receptor; myoglobin; p21; p27; p16; p53;  
 KW progesterone receptor; pcna; CEA; cdc2; c-erbB2; methylation; CpG;  
 KW characterisation; classification; diagnosis; differentiation;  
 KW colon cell proliferative disorder; PCR primer; ss.  
 XX OS Homo sapiens.  
 XX OS Synthetic.  
 XX PN WC2003014388-A2.  
 XX PD 20-FEB-2003.  
 XX PF 09-AUG-2002; 2002WO-EP008939.  
 XX PR 09-AUG-2001; 2001DE-01039283.  
 XX (EPIG-) EPIGENOMICS AG.  
 XX Distler J, Model F, Taubert H;  
 WPI; 2003-256600/25.  
 Determining methylation status of CpG dinucleotides using modified  
 genomic sequences, oligonucleotides and/or PNA-oligoners, useful in the  
 characterization, grading, staging and/or diagnosis of colon cancer.  
 Claim 26; Page 165; 219pp; English.

XX The present invention describes a method for determining the methylation  
 status of CpG dinucleotides within the genes for oestrogen receptor, p21,  
 p27, p16, progesterone receptor, myoglobin, pcna, cdc2, c-erbB2, p53  
 and/or CEA, which comprises contacting the target nucleic acid with a  
 reagent that distinguishes between methylated and non-methylated CpG  
 dinucleotides, and determining from the methylation status of the CpG  
 positions the presence of a colon cancer. A set of oligomers or peptide  
 nucleic acid (PNA)-oligoners can be used as probes for determining the  
 cytosine methylation state and/or single nucleotide polymorphisms (SNP)  
 of a corresponding genomic DNA by analysis of a chemically pretreated  
 genomic DNA. The pretreated genomic DNA is useful for the determination  
 of the methylation status of a corresponding genomic DNA and/or detection  
 of SNPs. The methods and pretreated genomic DNA are also useful for the  
 characterisation, classification, diagnosis and differentiation of colon  
 cell proliferative disorders. ACF62752 to ACF63278 represent sequences  
 used in the exemplification of the present invention

XX SQ Sequence 18 BP; 3 A; 11 C; 1 G; 3 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 12.8; DB 1; Length 18;  
 Best Local Similarity 87.5%; Pred. No. 5e+02;  
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1242 CGCTCCGACCCATC 1257  
 DB 3 CGCTCCGACCCATC 18

XX	DE	23S/16S rRNA detecting probe SEQ ID 11.
XX	DE	Detection; probe; contaminant; drinking water; Legionella; coliform;
XX	DE	faecal streptococci; soil; sputum; biopsy; urine; food; pharmaceutical;
XX	DE	cosmetic; fluorescent in situ hybridisation; FISH; ss.
XX	DE	Streptococcus sp.
XX	DE	W02002102824-A2.
XX	DE	27-DEC-2002.
XX	DE	19-JUN-2002; 2002WO-EP006809.
XX	DE	19-JUN-2001; 2001DE-01029411.
XX	DE	11-DEC-2001; 2001DE-01060666.
XX	DE	(VERM-) VERMICON AG.
XX	DE	Beimfohr C, Snaird J;
XX	DE	WPI; 2003-167479/16.
XX	DE	New oligonucleotides, useful for detecting bacteria that may contaminate
XX	DE	drinking water, provide quick results for many species in parallel.
XX	DE	Claim 8; Page 12; 53pp; German.
XX	DE	This invention describes novel oligonucleotide probes used to detect
XX	DE	contaminant bacteria that may be present in drinking water. The probes
XX	DE	can detect bacteria (especially Legionella, faecal streptococci and
XX	DE	coliforms) that may contaminate drinking water in environmental samples
XX	DE	(water or soil), clinical samples (sputum, biopsies, urine etc.), in
XX	DE	bathing and drinking water and in foods, pharmaceuticals and cosmetics,
XX	DE	by in situ hybridisation. The probes combine the advantages of
XX	DE	fluorescent in situ hybridisation with those of culture methods. Only a
XX	DE	relatively short culture step is required; analysis takes 24-48 hours
XX	DE	(contrast many days for conventional methods) and all relevant bacteria
XX	DE	between species of the same genus and are easy to use, allowing simple
XX	DE	analysis of a large number of samples. ABX94532-ABX94578 represent the
XX	DE	oligonucleotide probes described in the invention
XX	DE	Sequence 18 BP; 1 A; 7 C; 2 G; 8 T; 0 U; 0 Other;
XX	DE	Query Match 0.6%; Score 12.8; DB 1; Length 18;
XX	DE	Best Local Similarity 87.5%; Pred. No. 5e+02;
XX	DE	Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX	DE	QY 1011 ACCTGAAAGAGAGGGG 1026
XX	DE	Db 18 ACCGAAAGAGAGGAG 3
XX	DE	RESULT 463
XX	DE	AAD50970
XX	DE	ID AAD50970 standard; DNA; 18 BP.
XX	DE	AC AAD50970;
XX	DE	XX AAD50970;
XX	DE	DT 02-APR-2003 (first entry)
XX	DE	DE DM21 primer, to detect the presence of pTUBZ011-2 in Schizochytrium sp.
XX	DE	XX Acetolactate synthase; ALS; alpha-tubulin; polyketide synthase; PKS;
XX	DE	XX fatty acid desaturase; primer; ss.
XX	DE	OS Schizochytrium sp.
XX	DE	XX W0200283869-A2.
XX	DE	XX 24-OCT-2002.
XX	DE	23S/16S rRNA detecting probe SEQ ID 11.
XX	DE	Detection; probe; contaminant; drinking water; Legionella; coliform;
XX	DE	faecal streptococci; soil; sputum; biopsy; urine; food; pharmaceutical;
XX	DE	cosmetic; fluorescent in situ hybridisation; FISH; ss.
XX	DE	Streptococcus sp.
XX	DE	W02002102824-A2.
XX	DE	27-DEC-2002.
XX	DE	19-JUN-2002; 2002WO-EP006809.
XX	DE	19-JUN-2001; 2001DE-01029411.
XX	DE	11-DEC-2001; 2001DE-01060666.
XX	DE	(VERM-) VERMICON AG.
XX	DE	Beimfohr C, Snaird J;
XX	DE	WPI; 2003-167479/16.
XX	DE	New oligonucleotides, useful for detecting bacteria that may contaminate
XX	DE	drinking water, provide quick results for many species in parallel.
XX	DE	Claim 8; Page 12; 53pp; German.
XX	DE	This invention describes novel oligonucleotide probes used to detect
XX	DE	contaminant bacteria that may be present in drinking water. The probes
XX	DE	can detect bacteria (especially Legionella, faecal streptococci and
XX	DE	coliforms) that may contaminate drinking water in environmental samples
XX	DE	(water or soil), clinical samples (sputum, biopsies, urine etc.), in
XX	DE	bathing and drinking water and in foods, pharmaceuticals and cosmetics,
XX	DE	by in situ hybridisation. The probes combine the advantages of
XX	DE	fluorescent in situ hybridisation with those of culture methods. Only a
XX	DE	relatively short culture step is required; analysis takes 24-48 hours
XX	DE	(contrast many days for conventional methods) and all relevant bacteria
XX	DE	between species of the same genus and are easy to use, allowing simple
XX	DE	analysis of a large number of samples. ABX94532-ABX94578 represent the
XX	DE	oligonucleotide probes described in the invention
XX	DE	Sequence 18 BP; 1 A; 7 C; 2 G; 8 T; 0 U; 0 Other;
XX	DE	Query Match 0.6%; Score 12.8; DB 1; Length 18;
XX	DE	Best Local Similarity 87.5%; Pred. No. 5e+02;
XX	DE	Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX	DE	QY 1011 ACCTGAAAGAGAGGGG 1026
XX	DE	Db 18 ACCGAAAGAGAGGAG 3
XX	DE	RESULT 463
XX	DE	AAD50970
XX	DE	ID AAD50970 standard; DNA; 18 BP.
XX	DE	AC AAD50970;
XX	DE	XX AAD50970;
XX	DE	DT 02-APR-2003 (first entry)
XX	DE	DE DM21 primer, to detect the presence of pTUBZ011-2 in Schizochytrium sp.
XX	DE	XX Acetolactate synthase; ALS; alpha-tubulin; polyketide synthase; PKS;
XX	DE	XX fatty acid desaturase; primer; ss.
XX	DE	OS Schizochytrium sp.
XX	DE	XX W0200283869-A2.
XX	DE	XX 24-OCT-2002.
XX	DE	23S/16S rRNA detecting probe SEQ ID 11.
XX	DE	Detection; probe; contaminant; drinking water; Legionella; coliform;
XX	DE	faecal streptococci; soil; sputum; biopsy; urine; food; pharmaceutical;
XX	DE	cosmetic; fluorescent in situ hybridisation; FISH; ss.
XX	DE	Streptococcus sp.
XX	DE	W02002102824-A2.
XX	DE	27-DEC-2002.
XX	DE	19-JUN-2002; 2002WO-EP006809.
XX	DE	19-JUN-2001; 2001DE-01029411.
XX	DE	11-DEC-2001; 2001DE-01060666.
XX	DE	(VERM-) VERMICON AG.
XX	DE	Beimfohr C, Snaird J;
XX	DE	WPI; 2003-167479/16.

XX 16-APR-2002; 2002WO-US012040.  
 XX PF  
 XX PR  
 XX PR 16-APR-2001; 2001US-0284116P.  
 XX PR  
 XX PA (OMEG-) OMEGATECH INC.  
 XX PI  
 XX PI Roessler PG, Matthews TD, Ramseier TM, Metz JG;  
 XX WPI; 2003-075541/07.  
 XX DR  
 XX XX  
 XX XX New nucleic acid molecule, useful for transforming Thraustochytriales  
 PT microorganisms or the foreign nucleic acids in a Thraustochytriales.  
 XX PT  
 XX PS Example 4; Page 106; 112pp; English.  
 XX XX  
 XX CC The present invention relates to novel nucleic acids and proteins for  
 CC acetylactate synthase, acetylactate synthase (ALS) regulatory regions,  
 CC alpha-tubulin promoter, polyketide synthase (PKS) promoter and fatty acid  
 CC desaturase promoter from Thraustochytriales microorganisms. The nucleic  
 CC acids of the invention are useful for transforming Thraustochytriales  
 CC microorganisms or the foreign nucleic acids in a Thraustochytriales. The  
 CC present sequence is a primer which is used to detect the presence of  
 CC pTUBZB011-2 sequences in Schizochytrium species. This sequence is used in  
 CC the exemplification of the invention  
 XX CC  
 XX SQ Sequence 18 BP; 4 A; 5 C; 6 G; 3 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 12.8; DB 1; Length 18;  
 Best Local Similarity 87.5%; Pred. No. 5e+02; Mismatches 0; Gaps 0;  
 Matches 14; Conservative 0; Indels 2; Indels 0; Gaps 0;  
 QY 822 GGAGTGCACGAGTTG 837  
 DB 2 GAAGTGCACGAGTTG 17  
 RESULT 464  
 ADB54573/C  
 ID ADB54573 standard; DNA; 18 BP.  
 XX AC ADB54573;  
 XX DT 04-DEC-2003 (first entry)  
 XX DE Hybridisation oligonucleotide 111 used to analyse genomic DNA region.  
 XX KW colon cell proliferative disorder; non methylated CpG dinucleotide;  
 KW cytosstatic; cancer; adenoma; carcinoma; cytosine methylation state; ss;  
 XX probe.  
 XX OS Unidentified.  
 XX OS WO2003072821-A2.  
 XX PN  
 XX PD 04-SEP-2003.  
 XX PF 27-FEB-2003; 2003WO-EP002035.  
 XX PR 27-FEB-2002; 2002EP-00004551.  
 XX XX (EPIG-) EPIGENOMICS AG.  
 XX FA Adorjan P, Burger M, Maier S, Nimmrich I, Becker E, Lesche R;  
 XX PI Rujan T, Schmitt A;  
 XX WPI; 2003-731620/69.  
 XX DR  
 XX PT Detecting and differentiating between colon cell proliferative disorders  
 PT associated with a gene or its regulatory regions comprises contacting a  
 PT target nucleic acid in a biological sample obtained from the subject with  
 PT a reagent.

PS Claim 36; Page 32; 74pp; English.  
 XX CC  
 CC The invention relates to a novel method for detecting and differentiating  
 CC between colon cell proliferative disorders associated with at least one  
 CC gene or its regulatory regions. The method comprises contacting a target  
 CC nucleic acid in a biological sample obtained from the subject with at  
 CC least one reagent or a series of reagents, where the reagent or series of  
 CC reagents, distinguishes between methylated and non methylated CpG  
 CC dinucleotides within the target nucleic acid. The molecules of the  
 CC invention demonstrate cytosstatic activity whilst the method may useful  
 CC for detecting and differentiating between colon cell proliferative  
 CC disorders, including cancers such as colon adenoma and colon carcinoma.  
 CC The PNA (peptide nucleic acid)-oligomers are useful as probes for  
 CC determining cytosine methylation state or single nucleotide  
 CC polymorphisms. The current sequence is that of the hybridisation  
 CC oligonucleotide of the invention which was used to analyse the genomic  
 CC DNA region.  
 XX SQ Sequence 18 BP; 3 A; 1 C; 11 G; 3 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 12.8; DB 1; Length 18;  
 Best Local Similarity 87.5%; Pred. No. 5e+02; Mismatches 0; Gaps 0;  
 Matches 14; Conservative 0; Indels 2; Indels 0; Gaps 0;  
 QY 1242 CGCCTCCGACCCATC 1257  
 DB 16 CCCCTCCGACCCATC 1  
 RESULT 465  
 ADC70166/C  
 ID ADC70166 standard; DNA; 18 BP.  
 XX AC ADC70166;  
 XX DT 18-DEC-2003 (first entry)  
 XX DE Primer oligo used for analysing CpG islands in genomic DNA (SeqID 656).  
 XX KW PCR; primer; ss; lung cell proliferative disorder; CpG dinucleotide;  
 KW adenocarcinoma; squamous cell carcinoma; cytosstatic; probe; PNA-oligomer;  
 XX cytosine methylation state.  
 XX OS Unidentified.  
 XX OS WO2003052135-A2.  
 XX PN  
 XX PD 26-JUN-2003.  
 XX PF 10-DEC-2002; 2002WO-EP014026.  
 XX PR 14-DEC-2001; 2001DE-01061625.  
 XX XX (EPIG-) EPIGENOMICS AG.  
 XX XX Burger M, Field JK, Genc B, Liloglou T, Lipscher E, Maier S;  
 XX PI Nimmrich I;  
 XX WPI; 2003-533029/50.  
 XX DR  
 XX PT Detecting and differentiating cytosine methylation state of genomic DNA,  
 PT useful for diagnosing, treating prognosticating and/or monitoring lung  
 PT cell proliferative disorders e.g. adenocarcinoma and squamous cell  
 PT carcinoma.  
 XX PS Claim 15; SEQ ID NO 656; 58pp; English.  
 XX CC  
 CC This invention relates to a novel method for detecting and  
 CC differentiating between lung cell proliferative disorders associated with  
 CC at least one gene and/or their regulatory regions. Specifically, it  
 CC refers to a method comprising contacting a target nucleic acid in a  
 CC biological sample with at least one reagent, wherein the reagent is able  
 CC to distinguish between methylated and non-methylated CpG dinucleotides

CC present in the target DNA. As such, it is possible to further  
CC differentiate and diagnose medical conditions including adenocarcinoma  
CC and squamous cell carcinoma, and their respective adjacent lung tissue.  
CC The present invention describes cytosine oligomers and PNA-oligomers  
CC that are useful as probes for determining the cytosine methylation state  
CC or single nucleotide polymorphisms (SNPs) of the target sequence. This  
CC oligonucleotide sequence is a primer oligomer used for the analysis of  
CC CpG positions within genomic DNA, used in an exemplification of the  
CC invention.  
XX  
SQ Sequence 18 BP; 3 A; 1 C; 10 G; 4 T; 0 U; 0 Other;  
  
Query Match 0.6%; Score 12.8; DB 1; Length 18;  
Best Local Similarity 87.5%; Pred. No. 5e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
Qy 1253 CCATCCCCCAACCCCT 1268  
Db 17 CCATCCCGACCCCT 2  
  
RESULT 466  
ADC70336  
ID ADC70336 standard; DNA; 18 BP.  
XX  
AC ADC70336;  
XX  
DT 18-DEC-2003 (first entry)  
XX  
DE Primer oligo used for analysing CpG islands in genomic DNA (SeqID 826).  
XX  
KW PCR; primer; ss; lung cell proliferative disorder; CpG dinucleotide;  
KW adenocarcinoma; squamous cell carcinoma; cytosine; probe; PNA-oligomer;  
KW cytosine methylation state.  
XX  
OS Unidentified.  
XX  
FN WO2003052135-A2.  
XX  
PD 26-JUN-2003.  
XX  
PF 10-DEC-2002; 2002WO-EP014026.  
XX  
PR 14-DEC-2001; 2001DE-01061625.  
XX  
PA (EPIG-) EPIGENOMICS AG.  
XX  
PI Burger M, Field JK, Genc B, Liloglou T, Lipscher E, Maier S;  
PI Nimmrich I;  
XX  
DR WPI; 2003-533029/50.  
XX  
PT Detecting and differentiating cytosine methylation state of genomic DNA,  
PT useful for diagnosing, treating prognosticating and/or monitoring lung  
PT cell proliferative disorders e.g. adenocarcinoma and squamous cell  
PT carcinoma.  
XX  
PS Claim 15; SEQ ID NO 826; 58pp; English.  
XX  
CC This invention relates to a novel method for detecting and  
CC differentiating between lung cell proliferative disorders associated with  
CC at least one gene and/or their regulatory regions. Specifically, it  
CC refers to a method comprising contacting a target nucleic acid in a  
CC biological sample with at least one reagent, wherein the reagent is able  
CC to distinguish between methylated and non-methylated CpG dinucleotides  
CC present in the target DNA. As such, it is possible to further  
CC differentiate and diagnose medical conditions including adenocarcinoma  
CC and squamous cell carcinoma, and their respective adjacent lung tissue.  
CC The present invention describes cytosine oligomers and PNA-oligomers  
CC that are useful as probes for determining the cytosine methylation state  
CC or single nucleotide polymorphisms (SNPs) of the target sequence. This  
CC oligonucleotide sequence is a primer oligomer used for the analysis of  
CC CpG positions within genomic DNA, used in an exemplification of the

CC invention.  
XX  
SQ Sequence 18 BP; 4 A; 1 C; 5 G; 8 T; 0 U; 0 Other;  
  
Query Match 0.6%; Score 12.8; DB 1; Length 18;  
Best Local Similarity 87.5%; Pred. No. 5e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
Qy 765 AGGTTTCCTTCTTAAGA 780  
Db 3 AGGTTTCGTTTAAAGA 18  
  
RESULT 467  
AAD60507  
ID AAD60507 standard; DNA; 18 BP.  
XX  
AC AAD60507;  
XX  
DT 18-DEC-2003 (first entry)  
XX  
DE Human c-IAP-2 antisense oligonucleotide #ISIS #23480.  
XX  
KW Human; antisense; cellular inhibitor of apoptosis-2; c-IAP-2; cancer;  
KW hyperproliferative condition; apoptosis inhibitor 2; autoimmune disease;  
KW API-1; hIAP-1; MHC; gene therapy; phosphorothioate; ss.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..18  
FT /\*tag= a  
FT /\*mod\_base= OTHER  
FT /\*note= "Phosphorothioate backbone; All cytidine residues  
FT are 5-methylcytidines"  
FT modified\_base 1..4  
FT /\*tag= b  
FT /\*mod\_base= OTHER  
FT /\*note= "2'-methoxyethyl (2'-MOE) nucleotides"  
FT modified\_base 15..18  
FT /\*tag= c  
FT /\*mod\_base= OTHER  
FT /\*note= "2'-methoxyethyl (2'-MOE) nucleotides"  
XX  
PN US2003083300-A1.  
XX  
PD 01-MAY-2003.  
XX  
PF 16-JUL-2002; 2002US-00197290.  
XX  
PR 23-SEP-1999; 99WO-US022083.  
PR 04-OCT-2001; 2001US-00857299.  
XX  
PA (BENN/) BENNETT C F.  
PA (ACKE/) ACKERMANN E J.  
PA (COWS/) COWSERT I M.  
XX  
PI Bennett CF, Ackermann EJ, Cowsert LM;  
XX  
DR WPI; 2003-755119/71.  
XX  
PT New antisense compound, preferably an oligonucleotide, for inhibiting  
PT expression of human Cellular Inhibitor of Apoptosis-2 in human cells or  
PT tissues, and for treating diseases, such as cancer or an autoimmune  
PT disease.  
XX  
PS Example 16; Page 22; 34pp; English.  
XX  
CC The invention relates to antisense compounds targetted to a nucleic acid  
CC encoding human cellular inhibitor of apoptosis-2 (also known as c-IAP-2,  
CC apoptosis inhibitor 2, API-1, hIAP-1 and MHC) to inhibit its expression.  
CC Antisense compounds of the invention are used to induce apoptosis in



CC human cells or tissues to treat diseases or conditions associated with  
 CC insufficient apoptosis. They are used to treat diseases or conditions  
 CC associated with C-IAP-2 such as hyperproliferative conditions especially  
 CC cancer or autoimmune diseases. The invention is also useful in antisense  
 CC gene therapy. The present sequence is an antisense oligonucleotide  
 CC targetted to human C-IAP-2 DNA

XX  
 SQ Sequence 18 BP; 0 A; 9 C; 0 G; 9 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.8; DB 1; Length 18;  
 Best Local Similarity 87.5%; Pred. No. 5e+02;  
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 927 TTTATCCCTCTCTTC 942  
 |||||  
 Db 1 TTTCTCTCTCTCTTC 16

RESULT 468  
 ABZ97610  
 ID ABZ97610 standard; DNA; 19 BP.  
 XX  
 AC ABZ97610;  
 XX  
 DT 17-OCT-2003 (first entry)  
 XX  
 DE Human IL5-R oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;  
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
 KW antisthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.  
 OS  
 XX WO20020285308-A2.  
 PN  
 XX 31-OCT-2002.  
 PD  
 XX 23-APR-2002; 2002WO-US013135.  
 PF  
 XX 24-APR-2001; 2001US-0286137P.  
 PR  
 XX (EPIG-) EPIGENESIS PHARM INC.  
 PA  
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
 PI Miller S, Tang L, Shababuddin S;  
 XX  
 WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired  
 FT respiration, has oligo(s) antisense to specific gene(s) or its  
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
 PT ubiquinone.

XX Disclosure; SEQ ID NO 12852; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a  
 CC first active agent comprising an oligonucleotide antisense to the  
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
 CC junctions of genes encoding a polypeptide associated with lung and/or  
 CC nasal airway dysfunction and a second active agent comprising an  
 CC antiinflammatory steroid and ubiquinone. A composition of the invention  
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
 CC immunosuppressive, and cytostatic activity. The composition may have a  
 CC use in antisense gene therapy. The composition is useful for treating or  
 CC preventing a respiratory, lung or malignant disease or condition, also  
 CC for enhancing the prophylactic or therapeutic respiratory effect of an  
 CC antiinflammatory steroid in a subject, for reducing or depleting levels  
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine

CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
 CC lung inflammation, lung allergies, or a respiratory disease or condition.  
 CC Note: The sequence data for this patent is not represented in the printed  
 CC specification, but was obtained in electronic format directly from WIPO  
 CC at ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 19 BP; 4 A; 7 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.8; DB 1; Length 19;  
 Best Local Similarity 87.5%; Pred. No. 5.8e+02;  
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1079 CCACCTCCAGGCTTCAC 1094  
 |||||  
 Db 1 CAACCTCCAGGCTTC 16

RESULT 469  
 AAV55815/c  
 ID AAV55815 standard; DNA; 24 BP.  
 XX  
 AC AAV55815;  
 XX  
 DT 27-AUG-2003 (revised)  
 DT 18-NOV-1998 (first entry)  
 XX  
 DE Multimerisation of minimal motifs using primer ZGS2.

XX Fusion protein; stabilising polypeptide; proteolytic degradation;  
 KW resistance; half-life; autoimmune disease; inflammation; nitro drug;  
 KW IkappaB regulator protein; inflammatory bowel disease; in vivo imaging;  
 KW nitroreductase protein; enzyme therapy; prodrug therapy; protease;  
 KW cancer; pathological condition; minimal motif; PCR primer; ss.

XX Synthetic.  
 OS  
 XX Human herpesvirus 4.

XX WO9822577-A1.  
 PN  
 XX 28-MAY-1998.  
 PD  
 XX 17-NOV-1997; 97WO-IB001508.  
 PF  
 XX 15-NOV-1996; 96US-0030986P.  
 PR  
 XX 25-JUN-1997; 97US-0048945P.  
 XX  
 PA (MASU/) MASUCCI M G.

XX Masucci MG;  
 XX  
 WPI; 1998-312463/27.

XX New fusion proteins resistant to proteolytic degradation - comprising a  
 FT core protein with a stabilising polypeptide comprising a peptide sequence  
 PT containing glycine repeats.

XX Disclosure; Page 72; 120pp; English.

XX Sequences shown in AAV55812 to AAV55827 represent primers used in the  
 CC course of the invention for the multimerisation of minimal motifs. The  
 CC invention provides a method for increasing the resistance of a core  
 CC protein to proteolytic degradation that comprises linking or inserting  
 CC onto or into the core protein a stabilising polypeptide of formula  
 CC [(Gly)X(Gly)Y(Gly)Z]n where Gly, Glyb, Glyc are 1-6 sequential Gly  
 CC residues and X, Y, Z are Ala, Ser, Val, Ile, Leu, Met, Phe, Pro or Thr  
 CC and n can be anything between 1-66. X, Y and Z need not be identical from  
 CC n repeat to n repeat. Alternatively a nucleic acid encoding a stabilising  
 CC polypeptide can be linked onto or inserted into a nucleic acid encoding a  
 CC core protein. The fusion proteins of the invention are more resistant to  
 CC degradation by proteases and, thus, have a longer half-life than the  
 CC unfused core protein. The products can be used for treating autoimmune  
 CC diseases, cancer and inflammation. In particular, the core protein may be

CC an IkappaB regulator protein for the treatment of inflammatory bowel  
 CC disease, or a nitroreductase protein which can activate nitro drugs in  
 CC enzyme/prodrug therapy to treat cancer or other pathological conditions.  
 CC The fusion proteins can also be used in diagnostic methods such as in  
 CC vivo imaging. (Updated on 27-AUG-2003 to correct OS field.)  
 XX

SQ Sequence 24 BP; 4 A; 14 C; 2 G; 4 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 12.8; DB 1; Length 24;  
 Best Local Similarity 70.8%; Pred. No. 1.1e+03;  
 Matches 17; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

QY 295 GTGCTCGAGCTGTGTTGGGA 318  
 ||| ||||| ||||| |||||  
 Db 24 GTGGAGCTGGAGCTGGCGTGGAA 1

# RESULT 470

ID ABK95975/c

XX ABK95975 standard; DNA; 15 BP.

AC ABK95975;

DT 24-SEP-2002 (first entry)

XX Human LIPE gene polymorphism detection ASO primer #8.

DE Human; lipase; hormone sensitive; LIPE; isogene; obesity; primer; ss;  
 KW male sterility; polymorphism; allele-specific oligonucleotide; ASO.

XX Homo sapiens.

XX WO200240502-A2.

XX 23-MAY-2002.

PF 16-NOV-2001; 2001WO-US043518.

PR 16-NOV-2000; 2000US-0249302P.

PA (GENA-) GENAISSANCE PHARM INC.

PI Anastasio AE, Bentivegna SC, Chew A, Koshy B, Rounds E;

XX WPI; 2002-519369/55.

PT Novel genetic variants of Lipase, Hormone-Sensitive isogenes, useful for  
 PT improving efficiency and reliability in drug development for treating  
 PT diseases associated with LIPE activity, e.g. obesity and male sterility.

XX Claim 15; Page 15; 142pp; English.

CC The present invention relates to a new polynucleotide comprising a  
 CC nucleotide sequence which comprises lipase, hormone sensitive (LIPE)  
 CC isogenes. The invention is useful in screening for drugs targeting LIPE  
 CC isogenes that are useful for treating obesity and male sterility. The  
 CC methods of the invention are useful for improving the efficiency and  
 CC reliability of several steps in the discovery and development of drugs  
 CC for treating diseases associated with LIPE activity. The polynucleotide  
 CC is useful in studying the expression and function of LIPE, and in  
 CC expressing LIPE protein for use in screening for candidate drugs to treat  
 CC diseases related to LIPE activity. It is also useful in studying the  
 CC effect of the variation on the biological activity of LIPE as well as on  
 CC the binding affinity of candidate drugs targeting LIPE for the treatment  
 CC of obesity and male sterility. The invention is useful for studying the  
 CC expression of LIPE isogenes in vivo, for in vivo screening and testing of  
 CC drugs targeted against LIPE protein, and for testing the efficacy of  
 CC therapeutic agents and compounds for treating obesity and male sterility  
 CC in a biological system. The present nucleic acid sequence represents one  
 CC of a collection (ABK95968-ABK96025) of allele-specific oligonucleotide  
 CC (ASO) primers that were used in the invention to detect polymorphisms in  
 CC the human LIPE gene

SQ Sequence 15 BP; 2 A; 2 C; 7 G; 3 T; 0 U; 1 Other;

Query Match 0.6%; Score 12.6; DB 1; Length 15;  
 Best Local Similarity 92.3%; Pred. No. 3.2e+02;  
 Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1133 TCACCTCCAGCTC 1145  
 :|||:|||||  
 Db 14 YCACCCTCAGCTC 2

# RESULT 471

ID AAD43373/c

XX AAD43373 standard; DNA; 15 BP.

AC AAD43373;

XX 14-NOV-2002 (first entry)

XX Human CYP3A5 gene polymorphism detecting ASO primer #1.

DE Human; cytochrome P450; subfamily IIIA; polypeptide 5 isogene; CYP3A5;  
 KW drug screening; polymorphism; haplotype; drug metabolising disorder;  
 KW gene therapy; primer; ss.

XX Homo sapiens.

XX WO200246209-A2.

XX 13-JUN-2002.

PF 07-DEC-2001; 2001WO-US047218.

PR 08-DEC-2000; 2000US-0254367P.

PR 03-MAY-2001; 2001US-0288470P.

XX (GENA-) GENAISSANCE PHARM INC.

XX Anastasio AE, Han J, Klem SE, Rounds E;

XX WPI; 2002-636448/68.

PT Novel isolated polynucleotide which is a polymorphic variant of  
 PT cytochrome P450, subfamily IIIA, polypeptide 5 (CYP3A5) gene useful for  
 PT expressing CYP3A5 protein isoform used in drug screening techniques.

XX Claim 15; Page 15; 127pp; English.

CC The invention relates to isolated polynucleotide having cytochrome P450,  
 CC subfamily IIIA, polypeptide 5 isogene (CYP3A5). The invention is useful  
 CC for screening drugs. The invention is useful for studying expression and  
 CC function of CYP3A5 and expressing CYP3A5 protein for use in screening for  
 CC candidate drugs to treat diseases related to CYP3A5 activity. The  
 CC polymorphism and haplotype data is useful for validating whether CYP3A5  
 CC is a suitable target for drugs to treat drug metabolising disorders,  
 CC screening for such drugs and reducing bias in clinical trials of such  
 CC drugs. The invention is also useful for therapeutic purposes. The  
 CC invention is useful in studying the effect of variation on the biological  
 CC activity of CYP3A5 as well as on the binding affinity of candidate drugs  
 CC to CYP3A5, or for studying the enzymatic properties of such CYP3A5  
 CC variants using these candidate drugs as substrate. The invention is  
 CC useful in gene therapy. The present sequence is human CYP3A5 gene  
 CC polymorphism detecting ASO (allele-specific oligonucleotide) primer

SQ Sequence 15 BP; 0 A; 1 C; 8 G; 5 T; 0 U; 1 Other;

Query Match 0.6%; Score 12.6; DB 1; Length 15;

Best Local Similarity 92.3%; Pred. No. 3.2e+02;

Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1289 CCCACAGCCACA 1301

:|||:|||||

Db 15 CYCAAGCCACA 3



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XX KW Hepatitis C virus; HCV; NS5B replicase; ss; RNA polymerase.
XX OS Synthetic.
XX PN US2002064771-A1.
XX PD 30-MAY-2002.
XX PF 06-APR-2001; 2001US-00828034.
XX PR 07-APR-2000; 2000US-0195852P.
XX PA (ZHONG/) ZHONG W.
XX PA (HONG/) HONG Z.
XX PA (FERR/) FERRARI E.
XX PI Zhong W, Hong Z, Ferrari E;
XX DR WPI; 2002-582330/62.
XX PT Novel replicase complex comprising hepatitis C virus NS5B replicase, a 3
XX PT nucleotide-long template to which a 2 nucleotide-long primer is annealed,
XX PT and template and primer which do not form a stable duplex in the absence
XX PT of HCV NS5B.
XX PS Example; Page 6; 17pp; English.
XX CC The invention relates to a replicase complex comprising a hepatitis C
XX CC virus (HCV) NS5B replicase protein, a linear nucleic acid template and a
XX CC complementary nucleic acid primer which is annealed to the 3' terminus of
XX CC the template, where the template is at least three nucleotides and the
XX CC primer is two or three nucleotides, and the template and primer do not
XX CC form a stable duplex in solution in the absence of the HCV NS5B protein.
XX CC The complex is useful for detecting HCV replicase activity and permits
XX CC establishment of sensitive RNA-dependent RNA polymerase assays to screen
XX CC and evaluate antiviral inhibitors and to improve the specificity and
XX CC efficacy of the inhibitors. The complex is also useful in the development
XX CC of a reliable system for determining kinetic and thermodynamic constants
XX CC of HCV NS5B-catalysed nucleotide incorporation and investigation of
XX CC mechanistic inhibitors for mis-incorporation or chain termination.
XX CC Specifically, the short RNA template and primer pairs are useful in
XX CC screening assays which are used for determining kinetic, thermodynamic
XX CC and mechanistic properties of NS5B replication and ultimately in the
XX CC development of inhibitors of NS5B. Newly identified inhibitors of
XX CC replicase activity may be used for developing anti-HCV pharmaceuticals.
XX CC Sequences ABK99271-ABK99296 represent HCV NS5B replicase RNA synthesis
XX CC templates
XX SQ Sequence 14 BP; 2 A; 3 C; 7 G; 0 T; 2 U; 0 Other;
    Query Match 0.6%; Score 12.4; DB 1; Length 14;
    Best Local Similarity 78.6%; Pred No. 2.9e+02;
    Matches 11; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 1208 ATCAGGGGGGTGAC 1221
    |:|||||:|
Db 1 AUCAGGGGGGUGGC 14

RESULT 475
ADE13944
ID ADE13944 standard; DNA; 14 BP.
AC ADE13944;
XX 29-JAN-2004 (first entry)
XX DT Optineurin promoter motif, repeat element or regulatory region #53.
XX DE Human; optineurin; ds; ophthalmological; single nucleotide polymorphism;
XX KW SNP; glaucoma; progressive ocular hypertensive disorder;
XX KW glaucoma related disorder; motif; repeat element; regulatory region.
XX
XX OS Homo sapiens.
XX PN US2003190617-A1.
XX PD 09-OCT-2003.
XX PF 06-MAR-2002; 2002US-00091281.
XX PR 06-MAR-2002; 2002US-00091281.
XX PA (SIEE/) SI E.
XX PA (RAYM/) RAYMOND V.
XX PA (MORI/) MORISSETTE J.
XX PI Raymond V, Morissette J, Si E;
XX DR WPI; 2003-864168/80.
XX PT New nucleic acid sequences of the optineurin gene are useful to detect
XX PT polymorphisms particularly single nucleotide polymorphisms in the
XX PT optineurin promoter to diagnose, prognose and treat glaucoma and related
XX PT disorders.
XX PS Claim 11; SEQ ID NO 55; 159pp; English.
XX CC The invention relates to an isolated nucleic acid (N1) comprising at
XX CC least 20 but not more than 1500 consecutive nucleotides of the optineurin
XX CC promoter appearing as ADE13890. Also included are the optineurin promoter
XX CC operably linked to a heterologous nucleic acid, a nucleic acid capable of
XX CC detecting a single nucleotide polymorphism (SNP) in the optineurin
XX CC promoter, a host cell comprising the promoter operably linked to a
XX CC heterologous sequence, diagnosing or prognosing glaucoma in a sample
XX CC obtained from a cell or bodily fluid (comprising detecting a polymorphism
XX CC in a promoter region of the optineurin gene, associated with a glaucoma
XX CC phenotype), detecting a SNP sequence variation in a sample containing
XX CC DNA, detecting the presence of an optineurin promoter sequence variation
XX CC in a sample containing DNA, determining the presence or increased
XX CC susceptibility to glaucoma or to a progressive ocular hypertensive
XX CC disorder resulting in loss of visual field in a patient (or the severity
XX CC or progression of glaucoma in a patient, comprising providing
XX CC amplification reaction primers that direct amplification of a selected
XX CC nucleic acid region containing the variation within the optineurin
XX CC promoter and amplifying the DNA) and detecting a polymorphism (comprising
XX CC obtaining a sample containing human genomic DNA, providing a nucleic acid
XX CC capable of detecting a SNP located within an optineurin promoter, and
XX CC detecting the polymorphism). The invention is used to diagnose and
XX CC prognose glaucoma and also to treat glaucoma related disorders. The
XX CC present sequence is an optineurin promoter motif, repeat element or
XX CC putative regulatory region.
XX SQ Sequence 14 BP; 4 A; 2 C; 6 G; 2 T; 0 U; 0 Other;
    Query Match 0.6%; Score 12.4; DB 1; Length 14;
    Best Local Similarity 92.9%; Pred. No. 2.9e+02;
    Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1019 AAGAGGGGGGAGCTT 1032
    |||||
Db 1 AAGAGGGGGGAGCTT 14

RESULT 476
AAQ30739/C
ID AAQ30739 standard; DNA; 15 BP.
XX AC AAQ30739;
XX XX
XX DT 25-MAR-2003 (revised)
XX DT 25-MAR-1993 (first entry)
XX XX
XX DE DNA/RNA expression inhibiting modified oligomer.
XX XX

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CC diagnostic, analytical and therapeutic applications. The derivatives are  
 CC used as detectable labels for diagnostic assays, to enhance diagnostic  
 CC assays that use oligonucleotides and to improve potency of  
 CC oligonucleotides as antisense reagents that affect gene expression by  
 CC altering intracellular metabolism of complementary RNA sequences encoding  
 CC a target gene. They are also used in transfection complexes to deliver  
 CC oligonucleotides into cell cytoplasm and in PCR e.g. as primers, and  
 CC ligase chain reaction (LCR) e.g. as probes. The derivatives have  
 CC increased affinity and specificity for their complementary sequences and  
 CC facilitate PCR and LCR processes. The present sequence represents a  
 CC target for pyrimidine derivatives of the invention  
 XX  
 SQ Sequence 15 BP; 9 A; 0 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 15;  
 Best Local Similarity 92.9%; Pred. No. 3.6e+02;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 Qy 1016 AAAAAGAGGGGAG 1029  
 Db 1 AAAAAGAGGGGAG 14

RESULT 479  
 AAX32408/c  
 ID AAX32408 standard; DNA; 15 BP.

XX AAX32408;

XX 17-JUN-1999 (first entry)

XX Ab6 variable heavy (VH) chain CDR1 encoding DNA.

XX Agonist antibody; thrombopoietin receptor; TPO-R; thrombopoietin; DIC;  
 XX megakaryocyte; platelet; immunological; hematopoietic; thrombocytopenia;  
 XX bone marrow hypoplasia; disseminated intravascular coagulation; anemia;  
 XX myelodysplasia; myelotoxic chemotherapy; leukaemia; tumour; MusK; CDR;  
 XX neuromuscular; muscular dystrophy; complementarity determining region;  
 XX variable heavy chain; variable light chain; VH; VL; ss.

XX Homo sapiens.

XX WO9910494-A2.

XX 04-MAR-1999.

XX 21-AUG-1998; 98WO-US017364.

XX 25-AUG-1997; 97US-00918148.

XX (GETH ) GENENTECH INC.

XX Adams CW, Carter PJ, Fendly BM, Gurney AL;

XX WPI; 1999-204666/17.

XX P-ESDE; AAY06707.

XX New thrombopoietin receptor agonist antibodies - useful for treating  
 XX immunological or hematological disorders.

XX Claim 10; Page 81; 86pp; English.

XX The invention relates to an agonist antibody (Ab) which binds to a  
 XX thrombopoietin receptor (TPO-R). The antibodies which bind the TPO-R can  
 XX be used in the same way and for the same indications as thrombopoietin  
 XX (TPO). They can stimulate proliferation, differentiation or growth of  
 XX megakaryocytes. They may also be able to stimulate megakaryocytes to  
 XX increase platelet production. They can be used for treating immunological  
 XX or hematopoietic disorders, especially thrombocytopenia. Thrombocytopenia  
 XX -associated bone marrow hypoplasia (e.g. aplastic anemia following  
 XX chemotherapy or bone marrow transplant) may be effectively treated with  
 XX the antibody compounds as well as disorders such as disseminated  
 XX intravascular coagulation (DIC), immune thrombocytopenia (HIV-induced and

CC non HIV-induced), chronic idiopathic thrombocytopenia, congenital  
 CC thrombocytopenia, thrombotic thrombocytopenia and myelodysplasia. They  
 CC can also be used in e.g. myelotoxic chemotherapy for treatment of solid  
 CC tumours or leukaemia, myeloablative chemotherapy for autologous or  
 CC allogeneic bone marrow transplant, myelodysplasia, idiopathic aplastic  
 CC anemia, congenital thrombocytopenia, and immune thrombocytopenia. The  
 CC antibodies which bind to the MusK receptor can be used for improving  
 CC neuromuscular function in a patient, e.g. in muscular dystrophy. The  
 CC products can also be used for detection and diagnosis. The antibodies  
 CC have a longer half-life than the natural ligand for the TPO-R. Sequences  
 CC AAX32387-X32413 represent DNA fragments encoding the CDR1, CDR2, and CDR3  
 CC regions of variable heavy (VH) chains and variable light (VL) chains of  
 CC antibodies Ab1 to Ab6

SQ Sequence 15 BP; 4 A; 3 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 15;  
 Best Local Similarity 92.9%; Pred. No. 3.6e+02;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 795 CTCCTGTAGTAAC 808

Db 14 CTCAGTAGTAAC 1

RESULT 480

AAX62403/c

ID AAX62403 standard; RNA; 15 BP.

XX AAX62403;

XX 28-MAR-2000 (first entry)

XX Substrate for HH ribozyme HCV-298 which cleaves HCV RNA at nt. 298.

XX Enzymatic nucleic acid; hammerhead ribozyme; virus replication; cleavage;  
 XX cirrhosis; liver failure; hepatocellular carcinoma; interferon; cancer;  
 XX autoimmune disease; ss.

XX Hepatitis C virus.

XX WO9955847-A2.

XX 04-NOV-1999.

XX 26-APR-1999; 99WO-US009027.

XX 27-APR-1998; 98US-0083217P.

XX 18-SEP-1998; 98US-0100842P.

XX 25-FEB-1999; 99US-00257608.

XX 23-MAR-1999; 99US-00274553.

XX (RIBO-) RIBOZYME PHARM INC.

XX Blatt L, Mcswiggen JA, Roberts E, Pavco PA, Macejak D;

XX WPI; 2000-062023/05.

XX Novel ribozymes for the treatment of diseases and conditions related to  
 XX hepatitis C infection.

XX Claim 1; Page 50; 123pp; English.

XX The present sequence represents the preferred target sequence of an  
 XX enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves  
 XX the Hepatitis C virus (HCV) RNA sequence at the base position given in  
 XX the descriptor line. The HCV sequence was screened for optimal ribozyme  
 XX target sites using a computer folding algorithm and regions of the mRNA  
 XX which did not form secondary folding structures and contained potential  
 XX ribozyme cleavage sites were identified. Ribozymes were synthesised to  
 XX target these sites and their activities optimised by either varying the  
 XX length of the binding arms or by modification to prevent degradation by  
 XX nucleases. The ribozymes of the invention inhibit gene expression and/or

CC viral replication, and are used to treat diseases associated with  
 CC Hepatitis C virus (HCV) infection, e.g. cirrhosis, liver failure and  
 CC hepatocellular carcinoma. The ribozymes may be used in combination with  
 CC interferon to treat HCV infection, other infectious diseases, autoimmune  
 CC diseases, and cancer

SQ Sequence 15 BP; 2 A; 3 C; 6 G; 0 T; 4 U; 0 Other;  
 Query Match 0.6%; Score 12.4; DB 1; Length 15;  
 Best Local Similarity 92.9%; Pred. No. 3.6e+02;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1200 ACCACCTATCAGG 1213  
 | | | | | | | | | |  
 Db 15 AGCACCTATCAGG 2

RESULT 481  
 AAA29446  
 ID AAA29446 standard; DNA; 15 BP.

XX AC AAA29446;

XX DT 08-AUG-2000 (first entry)

XX DE Hepatitis C virus modular capture oligonucleotide #11.

XX KW Primer extension product; modular oligonucleotide; identification;

XX KW hybridisation; probe; Hepatitis C virus; HCV; ss.

XX OS Hepatitis C virus.

XX PN WC200015842-A1.

XX PD 23-MAR-2000.

XX PF 15-SEP-1999; 99WO-GB003056.

XX PR 15-SEP-1998; 98US-00153242.

XX PR 16-SEP-1998; 98GB-00020185.

XX PA (DYNA-) DYNAL AS.

XX PA (JONE/) JONES S L.

XX PI Lundeberg J, Uhlen M;

XX PS WPI; 2000-271472/23.

XX PT Isolating primer extension products using modular oligonucleotides.

XX PS Example 1; Page 39; 74pp; English.

XX CC A method (I) has been developed of isolating primer extension products,  
 CC produced from template vectors and containing sequences corresponding to  
 CC or complementary to (i) to (iii) below, where the method comprises  
 CC binding a modular oligonucleotide, comprising 2 parts (or modules), to  
 CC adjacent stretches on the primer extension products (the modular  
 CC oligonucleotide is complementary to and capable of binding to the vector  
 CC derived sequences of the primer extension products and at least 1 module  
 CC (the capture module) is immobilized or can be immobilised: (i) a primer  
 CC binding region; (ii) an insert; and (iii) vector derived sequence(s).  
 CC Also described is a method for determining the nucleotide sequence of a  
 CC nucleic acid insert in a vector, in which sequencing products are  
 CC generated by performing appropriate extension reaction on the vector, the  
 CC sequencing products are isolated via (I) and the isolated products are  
 CC separated by an appropriate technique and the labels carried on the  
 CC sequencing products are visualised to allow determination of the sequence  
 CC of the insert or a portion of it. (I) may be used for isolating primer  
 CC extension products, particularly sequencing reaction products in which  
 CC the products contain sequences corresponding or complementary to primer  
 CC binding regions, inserts and vector derived sequences. The present  
 CC sequence represents a modular capture oligonucleotide for a Hepatitis C  
 CC virus (HCV) target sequence, which is used in an example from the present

CC invention  
 XX SQ Sequence 15 BP; 4 A; 6 C; 3 G; 2 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 12.4; DB 1; Length 15;  
 Best Local Similarity 92.9%; Pred. No. 3.6e+02;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1200 ACCACCTATCAGG 1213  
 | | | | | | | | | |  
 Db 1 AGCACCTATCAGG 14

RESULT 482  
 AAF47941  
 ID AAF47941 standard; DNA; 15 BP.

XX AC AAF47941;

XX DT 30-MAR-2001 (first entry)

XX DE IGFBP3 oligonucleotide #1361.

XX KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;  
 KW cyostatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
 KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis;  
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;  
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
 KW hyperneovascular condition; hyperplasia; kidney disease;  
 KW neovascular condition of the retina; ss.

XX OS Homo sapiens.

XX PN WC200078341-A1.

XX PD 28-DEC-2000.

XX PF 21-JUN-2000; 2000WO-AU000693.

XX PR 21-JUN-1999; 99US-0140345P.

XX PA (MURD-) MURDOCH CHILDRENS RES INST.

XX PI Wraight CJ, Werther GA, Edmondson SR;

XX PS WPI; 2001-041421/05.

XX PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering  
 UV (ultra-violet) treatment (optional) and an antisense nucleic acid that  
 PT inhibits or reduces growth factor mediated cell proliferation and/or  
 PT inflammation.

XX PS Example 7; Page 53; 201pp; English.

XX CC The present invention relates to a method for ameliorating the effects of  
 CC skin disorders. The method comprises contacting the skin with an  
 CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1  
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of  
 CC inhibiting or reducing growth factor mediated cell proliferation,  
 CC inflammation and/or other disorders. The present sequence is an  
 CC oligonucleotide which can be used to design the antisense  
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-  
 CC F45161). The method is useful for ameliorating the effects of psoriasis,  
 CC ichthyosis, ptyriasis, ruba, pilaris, serborrhea, keloids, keratosis,  
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a  
 CC hyperneovascular condition such as a neovascular condition of the retina,  
 CC brain or skin, growth factor-mediated malignancies, other sclerotic  
 CC disease, kidney disease, hyperproliferation of the inside of blood  
 CC vessels or any other hyperplasia

XX SQ Sequence 15 BP; 3 A; 9 C; 1 G; 2 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 15;  
 Best Local Similarity 92.9%; Pred. No. 3.6e+02;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1085 CAGGCTTCACCCC 1098  
 DB 2 CAGGCTTCACCCC 15

RESULT 483  
 AAF47946  
 ID AAF47946 standard; DNA; 15 BP.  
 XX AC AAF47946;  
 XX  
 DT 30-MAR-2001 (first entry)  
 XX  
 DE IGFBP3 oligonucleotide #1366.  
 XX  
 KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;  
 KW cytosatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
 KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;  
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;  
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
 KW hyperneovascular condition; hyperplasia; kidney disease;  
 KW neovascular condition of the retina; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200078341-A1.  
 XX  
 PD 28-DEC-2000.  
 XX  
 PF 21-JUN-2000; 2000WO-AU000693.  
 XX  
 PR 21-JUN-1999; 99US-0140345P.  
 XX  
 PA (MURDOCH CHILDRENS RES INST.  
 XX  
 PI Wright CJ, Werther GA, Edmondson SR;  
 XX  
 DR WPI; 2001-041421/05.  
 XX  
 PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering  
 PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that  
 PT inhibits or reduces growth factor mediated cell proliferation and/or  
 PT inflammation.  
 XX  
 PS Example 7; Page 53; 201pp; English.  
 XX  
 CC The present invention relates to a method for ameliorating the effects of  
 CC skin disorders. The method comprises contacting the skin with an  
 CC antisense oligonucleotide, (for insulin-like Growth Factor [IGF]-1  
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of  
 CC inhibiting or reducing growth factor mediated cell proliferation,  
 CC inflammation and/or other disorders. The present sequence is an  
 CC oligonucleotide which can be used to design the antisense  
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-  
 CC F45161). The method is useful for ameliorating the effects of psoriasis,  
 CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,  
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a  
 CC hyperneovascular condition such as a neovascular condition of the retina,  
 CC brain or skin, growth factor-mediated malignancies, other sclerotic  
 CC diseases, kidney disease, hyperproliferation of the inside of blood  
 CC vessels or any other hyperplasia  
 XX  
 SQ Sequence 15 BP; 2 A; 10 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 15;  
 Best Local Similarity 92.9%; Pred. No. 3.6e+02;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1085 CAGGCTTCACCCC 1098  
 DB 2 CAGGCTTCACCCC 15

RESULT 483  
 AAF47946  
 ID AAF47946 standard; DNA; 15 BP.  
 XX AC AAF47946;  
 XX  
 DT 30-MAR-2001 (first entry)  
 XX  
 DE IGFBP3 oligonucleotide #1366.  
 XX  
 KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;  
 KW cytosatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
 KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;  
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;  
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
 KW hyperneovascular condition; hyperplasia; kidney disease;  
 KW neovascular condition of the retina; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200078341-A1.  
 XX  
 PD 28-DEC-2000.  
 XX  
 PF 21-JUN-2000; 2000WO-AU000693.  
 XX  
 PR 21-JUN-1999; 99US-0140345P.  
 XX  
 PA (MURDOCH CHILDRENS RES INST.  
 XX  
 PI Wright CJ, Werther GA, Edmondson SR;  
 XX  
 DR WPI; 2001-041421/05.  
 XX  
 PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering  
 PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that  
 PT inhibits or reduces growth factor mediated cell proliferation and/or  
 PT inflammation.  
 XX  
 PS Example 7; Page 53; 201pp; English.  
 XX  
 CC The present invention relates to a method for ameliorating the effects of  
 CC skin disorders. The method comprises contacting the skin with an  
 CC antisense oligonucleotide, (for insulin-like Growth Factor [IGF]-1  
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of  
 CC inhibiting or reducing growth factor mediated cell proliferation,  
 CC inflammation and/or other disorders. The present sequence is an  
 CC oligonucleotide which can be used to design the antisense  
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-  
 CC F45161). The method is useful for ameliorating the effects of psoriasis,  
 CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,  
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a  
 CC hyperneovascular condition such as a neovascular condition of the retina,  
 CC brain or skin, growth factor-mediated malignancies, other sclerotic  
 CC diseases, kidney disease, hyperproliferation of the inside of blood  
 CC vessels or any other hyperplasia  
 XX  
 SQ Sequence 15 BP; 2 A; 10 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 15;  
 Best Local Similarity 92.9%; Pred. No. 3.6e+02;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1085 CAGGCTTCACCCC 1098  
 DB 2 CAGGCTTCACCCC 15

RESULT 484  
 AAF49432  
 ID AAF49432 standard; DNA; 15 BP.  
 XX AC AAF49432;  
 XX  
 DT 30-MAR-2001 (first entry)  
 XX  
 DE IGF-I oligonucleotide #392.  
 XX  
 KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;  
 KW cytosatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
 KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;  
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;  
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
 KW hyperneovascular condition; hyperplasia; kidney disease;  
 KW neovascular condition of the retina; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200078341-A1.  
 XX  
 PD 28-DEC-2000.  
 XX  
 PF 21-JUN-2000; 2000WO-AU000693.  
 XX  
 PR 21-JUN-1999; 99US-0140345P.  
 XX  
 PA (MURDOCH CHILDRENS RES INST.  
 XX  
 PI Wright CJ, Werther GA, Edmondson SR;  
 XX  
 DR WPI; 2001-041421/05.  
 XX  
 PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering  
 PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that  
 PT inhibits or reduces growth factor mediated cell proliferation and/or  
 PT inflammation.  
 XX  
 PS Example 8; Page 63; 201pp; English.  
 XX  
 CC The present invention relates to a method for ameliorating the effects of  
 CC skin disorders. The method comprises contacting the skin with an  
 CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1  
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of  
 CC inhibiting or reducing growth factor mediated cell proliferation,  
 CC inflammation and/or other disorders. The present sequence is an  
 CC oligonucleotide which can be used to design the antisense  
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-  
 CC F45161). The method is useful for ameliorating the effects of psoriasis,  
 CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,  
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a  
 CC hyperneovascular condition such as a neovascular condition of the retina,  
 CC brain or skin, growth factor-mediated malignancies, other sclerotic  
 CC disease, kidney disease, hyperproliferation of the inside of blood  
 CC vessels or any other hyperplasia  
 XX  
 SQ Sequence 15 BP; 1 A; 6 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 15;  
 Best Local Similarity 92.9%; Pred. No. 3.6e+02;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 899 CCTGGTTCATTTTC 912  
 DB 1 CCTGGTTCATTTTC 14





```

XX IGF-I oligonucleotide #802.
DE
XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW cytosatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW hyperneovascular condition; hyperplasia; kidney disease;
KW neovascular condition of the retina; ss.
OS Homo sapiens.
XX
XX WO200078341-A1.
XX
XX 28-DEC-2000.
XX
XX 21-JUN-2000; 2000WO-AU000693.
XX
XX 21-JUN-1999; 99US-0140345P.
XX
XX (MURD-) MURDOCH CHILDRENS RES INST.
XX
XX Wright CJ, Werther GA, Edmondson SR;
XX WPI; 2001-041421/05.
XX
XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT inhibits or reduces growth factor mediated cell proliferation and/or
PT inflammation.
XX
XX Example 8; Page 66; 201pp; English.
XX
XX The present invention relates to a method for ameliorating the effects of
CC skin disorders. The method comprises contacting the skin with an
CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC inhibiting or reducing growth factor mediated cell proliferation,
CC inflammation and/or other disorders. The present sequence is an
CC oligonucleotide which can be used to design the antisense
CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC F45161). The method is useful for ameliorating the effects of psoriasis,
CC ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis,
CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC hyperneovascular condition such as a neovascular condition of the retina,
CC brain or skin, growth factor-mediated malignancies, other sclerotic
CC disease, kidney disease, hyperproliferation of the inside of blood
CC vessels or any other hyperplasia
XX
XX Sequence 15 BP; 4 A; 6 C; 1 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 12.4; DB 1; Length 15;
Best Local Similarity 92.9%; Pred. No. 3.6e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1039 ACTACTACTAAGCC 1052
Db 2 ACTACTACTAAGCC 15
|||||
RESULT 488
AAF49431
ID AAF49431 standard; DNA; 15 BP.
XX
XX AAF49431;
XX
XX 30-MAR-2001 (first entry)
XX
XX IGF-I oligonucleotide #391.
XX
XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW cytosatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW hyperneovascular condition; hyperplasia; kidney disease;
KW neovascular condition of the retina; ss.
OS Homo sapiens.
XX
XX WO200078341-A1.
XX
XX 28-DEC-2000.
XX
XX 21-JUN-2000; 2000WO-AU000693.
XX
XX 21-JUN-1999; 99US-0140345P.
XX
XX (MURD-) MURDOCH CHILDRENS RES INST.
XX
XX Wright CJ, Werther GA, Edmondson SR;
XX WPI; 2001-041421/05.
XX
XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT inhibits or reduces growth factor mediated cell proliferation and/or
PT inflammation.
XX
XX Example 8; Page 66; 201pp; English.
XX
XX The present invention relates to a method for ameliorating the effects of
CC skin disorders. The method comprises contacting the skin with an
CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC inhibiting or reducing growth factor mediated cell proliferation,
CC inflammation and/or other disorders. The present sequence is an
CC oligonucleotide which can be used to design the antisense
CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC F45161). The method is useful for ameliorating the effects of psoriasis,
CC ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis,
CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC hyperneovascular condition such as a neovascular condition of the retina,
CC brain or skin, growth factor-mediated malignancies, other sclerotic
CC disease, kidney disease, hyperproliferation of the inside of blood
CC vessels or any other hyperplasia
XX
XX Sequence 15 BP; 4 A; 6 C; 1 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 12.4; DB 1; Length 15;
Best Local Similarity 92.9%; Pred. No. 3.6e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 899 CCTCGTTCATTTC 912
Db 2 CCTCGTTCATTTC 15
|||||
RESULT 489
AAF46484/C
ID AAF46484 standard; DNA; 15 BP.
XX
XX AAF46484;
XX
XX 30-MAR-2001 (first entry)
XX
XX IGFBP2 oligonucleotide #1323.
XX
XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW cytosatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;

```

KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
 KW hyperneovascular condition; hyperplasia; kidney disease;  
 KW neovascular condition of the retina; ss.  
 XX Homo sapiens.  
 XX WO200078341-A1.  
 XX PD 28-DEC-2000.  
 XX PF 21-JUN-2000; 2000WO-AU000693.  
 XX PR 21-JUN-1999; 99US-0140345P.  
 XX PA (MURD-) MURDOCH CHILDRENS RES INST.  
 XX PI Wright CJ, Werther GA, Edmondson SR;  
 XX WPI; 2001-041421/05.  
 XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering  
 UV (ultra-violet) treatment (optional) and an antisense nucleic acid that  
 inhibits or reduces growth factor mediated cell proliferation and/or  
 inflammation.  
 XX Example 6; Page 42; 201pp; English.  
 XX The present invention relates to a method for ameliorating the effects of  
 skin disorders. The method comprises contacting the skin with an  
 antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1  
 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of  
 inhibiting or reducing growth factor mediated cell proliferation,  
 inflammation and/or other disorders. The present sequence is an  
 oligonucleotide of the present invention (see AAP45151 and AAP45153-  
 F45161). The method is useful for ameliorating the effects of psoriasis,  
 ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,  
 neoplasias, scleroderma, warts, benign growths, cancers of the skin, a  
 hyperneovascular condition such as a neovascular condition of the retina,  
 brain or skin, growth factor-mediated malignancies, other sclerotic  
 disease, kidney disease, hyperproliferation of the inside of blood  
 vessels or any other hyperplasia  
 XX Sequence 15 BP; 2 A; 0 C; 10 G; 3 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 12.4; DB 1; Length 15;  
 Best Local Similarity 92.9%; Pred. No. 3.6e+02;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 Qy 1257 CCCCAACCCCTTC 1270  
 Db 15 CCACACCCCTTC 2  
 RESULT 490  
 AAF49843  
 ID AAF49843 standard; DNA; 15 BP.  
 XX AAF49843;  
 XX 30-MAR-2001 (first entry)  
 XX IGF-I oligonucleotide #803.  
 XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;  
 KW cytosstatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
 KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;  
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;  
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
 KW hyperneovascular condition; hyperplasia; kidney disease;  
 KW neovascular condition of the retina; ss.

OS Homo sapiens.  
 XX WO200078341-A1.  
 XX PD 28-DEC-2000.  
 XX PF 21-JUN-2000; 2000WO-AU000693.  
 XX PR 21-JUN-1999; 99US-0140345P.  
 XX PA (MURD-) MURDOCH CHILDRENS RES INST.  
 XX PI Wright CJ, Werther GA, Edmondson SR;  
 XX WPI; 2001-041421/05.  
 XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering  
 UV (ultra-violet) treatment (optional) and an antisense nucleic acid that  
 inhibits or reduces growth factor mediated cell proliferation and/or  
 inflammation.  
 XX Example 8; Page 66; 201pp; English.  
 XX The present invention relates to a method for ameliorating the effects of  
 skin disorders. The method comprises contacting the skin with an  
 antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1  
 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of  
 inhibiting or reducing growth factor mediated cell proliferation,  
 inflammation and/or other disorders. The present sequence is an  
 oligonucleotide of the present invention (see AAP45151 and AAP45153-  
 F45161). The method is useful for ameliorating the effects of psoriasis,  
 ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,  
 neoplasias, scleroderma, warts, benign growths, cancers of the skin, a  
 hyperneovascular condition such as a neovascular condition of the retina,  
 brain or skin, growth factor-mediated malignancies, other sclerotic  
 disease, kidney disease, hyperproliferation of the inside of blood  
 vessels or any other hyperplasia  
 XX Sequence 15 BP; 4 A; 5 C; 2 G; 4 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 12.4; DB 1; Length 15;  
 Best Local Similarity 92.9%; Pred. No. 3.6e+02;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 Qy 1039 ACTACTACTAAGCC 1052  
 Db 1 ACTACTACTATGCC 14  
 RESULT 491  
 AAF46485/C  
 ID AAF46485 standard; DNA; 15 BP.  
 XX AAF46485;  
 XX 30-MAR-2001 (first entry)  
 XX IGFBP2 oligonucleotide #1324.  
 XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;  
 KW cytosstatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
 KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;  
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;  
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
 KW hyperneovascular condition; hyperplasia; kidney disease;  
 KW neovascular condition of the retina; ss.  
 XX Homo sapiens.  
 XX WO200078341-A1.  
 XX

PD 28-DEC-2000.  
XX  
XX  
PF 21-JUN-2000; 2000WO-AU000693.  
XX  
XX 21-JUN-1999; 99US-0140345P.  
XX  
XX (MURD-) MURDOCH CHILDRENS RES INST.  
XX  
XX Wright CJ, Werther GA, Edmondson SR;  
XX  
XX WPI; 2001-041421/05.  
XX  
XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering  
PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that  
PT inhibits or reduces growth factor mediated cell proliferation and/or  
PT inflammation.  
XX  
XX Example 6; Page 42; 201pp; English.  
XX  
XX The present invention relates to a method for ameliorating the effects of  
CC skin disorders. The method comprises contacting the skin with an  
CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1  
CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of  
CC inhibiting or reducing growth factor mediated cell proliferation,  
CC inflammation and/or other disorders. The present sequence is an  
CC oligonucleotide which can be used to design the antisense  
CC oligonucleotides of the present invention (see AAF45151 and AAF45153-  
CC F45161). The method is useful for ameliorating the effects of psoriasis,  
CC ichthyosis, pityriasis, ruba, pilaris, seborrheoa, keloids, keratosis,  
CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a  
CC hyperneovascular condition such as a neovascular condition of the retina,  
CC brain or skin, growth factor-mediated malignancies, other sclerotic  
CC disease, kidney disease, hyperproliferation of the inside of blood  
CC vessels or any other hyperplasia  
XX  
SQ Sequence 15 BP; 2 A; 0 C; 9 G; 4 T; 0 U; 0 Other;  
  
Query Match 0.6%; Score 12.4; DB 1; Length 15;  
Best Local Similarity 92.9%; Pred. No. 3.6e+02;  
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
QY 1257 CCCAACCCCTTC 1270  
DB 14 CCACAAACCCCTTC 1  
  
RESULT 492  
ABX00259/c  
ID ABX00259 standard; RNA; 15 BP.  
XX  
XX AC ABX00259;  
XX  
XX 23-DEC-2002 (first entry)  
XX  
DE Hepatitis C virus substrate #41 for HCV hammerhead ribozyme #41.  
XX  
XX Enzymatic nucleic acid; RNA cleavage; Hepatitis C virus infection;  
KW HCV ribozyme; HCV expression; HCV replication; cirrhosis; virucide;  
KW liver failure; hepatocellular carcinoma; HCV infection; drug therapy;  
KW type I interferon; interferon alpha; interferon beta; cytosstatic;  
KW interferon gamma; consensus interferon; hepatotropic; antiinflammatory;  
KW substrate; hammerhead ribozyme; HH ribozyme; ss.  
XX  
XX Hepatitis C virus.  
XX  
XX US2002082225-A1.  
PN 27-JUN-2002.  
XX  
XX 23-MAR-1999; 99US-00274553.  
XX  
XX 23-MAR-1999; 99US-00274553.  
XX  
XX 23-MAR-1999; 99US-00274553.  
XX

PA (BLAT/) BLATT L.  
PA (MCSW/) MCSWIGGEN J A.  
PA (ROBE/) ROBERTS B.  
PA (PAVC/) PAVCO P A.  
PA (MACE/) MACEJACK D.  
XX  
XX Blact L, Mcswiggen JA, Roberts B, Pavco PA, Macejack D;  
XX WPI; 2002-617759/66.  
XX  
XX New ribozymes targeting RNA derived from hepatitis C virus inhibit viral  
PT replication and are useful to treat hepatitis C virus infections and  
PT cirrhosis, liver failure or hepatocellular carcinoma.  
XX  
XX Claim 1; Page 22; 80pp; English.  
XX  
XX The present invention relates to enzymatic nucleic acids which  
CC specifically cleave RNA derived from Hepatitis C virus (HCV). The  
CC enzymatic nucleic acid or ribozyme is in a hammerhead (HH) or hairpin  
CC (HP) motif where the binding arms comprise sequences complementary to one  
CC of the substrate sequences defined in the specification. The HCV  
CC ribozymes are useful for modulating the expression and/or replication of  
CC HCV. They can be used to treat cirrhosis, liver failure and/or  
CC hepatocellular carcinoma. The HCV ribozymes are also useful for treating  
CC a condition associated with HCV infection in conjunction with one or more  
CC other drug therapies, particularly type I interferon, especially  
CC interferon alpha, beta or gamma or consensus interferon. The present  
CC sequence represents a substrate for a HCV hammerhead (HH) ribozyme. Note:  
CC Some of the sequence data for this patent did not form part of the  
CC printed specification. The complete sequence data for this patent was  
CC obtained in electronic format directly from the USPTO web site at  
CC segdata.uspto.gov/psipsDIDEntry.html  
XX  
SQ Sequence 15 BP; 2 A; 3 C; 6 G; 0 T; 4 U; 0 Other;  
  
Query Match 0.6%; Score 12.4; DB 1; Length 15;  
Best Local Similarity 92.9%; Pred. No. 3.6e+02;  
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
QY 1200 ACCACCTTCAGG 1213  
DB 15 AGCACCTTCAGG 2  
  
RESULT 493  
ABX01756  
ID ABX01756 standard; RNA; 15 BP.  
XX  
XX AC ABX01756;  
XX  
XX 23-DEC-2002 (first entry)  
XX  
XX Hepatitis C virus (HCV) ribozyme related RNA sequence #25.  
XX  
XX Enzymatic nucleic acid; RNA cleavage; Hepatitis C virus infection;  
KW HCV ribozyme; HCV expression; HCV replication; cirrhosis; virucide;  
KW liver failure; hepatocellular carcinoma; HCV infection; drug therapy;  
KW type I interferon; interferon alpha; interferon beta; cytosstatic; ss;  
KW interferon gamma; consensus interferon; hepatotropic; antiinflammatory.  
XX  
XX Unidentified.  
XX  
XX US2002082225-A1.  
PN 27-JUN-2002.  
XX  
XX 23-MAR-1999; 99US-00274553.  
XX  
XX 23-MAR-1999; 99US-00274553.  
XX  
XX (BLAT/) BLATT L.  
XX (MCSW/) MCSWIGGEN J A.  
XX (ROBE/) ROBERTS B.

PA (PAVC/) PAVCO P A.  
 PA (MACE/) MACEJACK D.  
 XX  
 XX Blatt L, Mcswiggen JA, Roberts B, Pavco PA, Macejack D;  
 XX WPI; 2002-617759/66.  
 XX  
 XX New ribozymes targeting RNA derived from hepatitis C virus inhibit viral  
 PT replication and are useful to treat hepatitis C virus infections and  
 PT cirrhosis, liver failure or hepatocellular carcinoma.  
 XX  
 XX Disclosure; SEQ ID NO 1538; 80pp; English.  
 XX  
 XX The present invention relates to enzymatic nucleic acids which  
 CC specifically cleave RNA derived from Hepatitis C virus (HCV). The  
 CC enzymatic nucleic acid or ribozyme is in a hammerhead (HH) or hairpin  
 CC (HP) motif where the binding arms comprise sequences complementary to one  
 CC of the substrate sequences defined in the specification. The HCV  
 CC ribozymes are useful for modulating the expression and/or replication of  
 CC HCV. They can be used to treat cirrhosis, liver failure and/or  
 CC hepatocellular carcinoma. The HCV ribozymes are also useful for treating  
 CC other drug therapies, particularly type I interferon, especially  
 CC a condition associated with HCV infection in conjunction with one or more  
 CC interferon alpha, beta or gamma or consensus interferon. The present  
 CC sequence represents a RNA sequence of unknown function. Note: The present  
 CC sequence is given in the sequence data but is not mentioned elsewhere in  
 CC the specification. The complete sequence data for this patent was  
 CC obtained in electronic format directly from the USPTO web site at  
 CC seqdata.uspto.gov/psipsDIDEntry.html  
 XX  
 XX Sequence 15 BP; 5 A; 5 C; 3 G; 0 T; 2 U; 0 Other;  
 SQ  
 Query Match 0.6%; Score 12.4; DB 1; Length 15;  
 Best Local Similarity 78.6%; Pred. No. 3.6e+02;  
 Matches 11; Conservative 2; Mismatches 1; Indels 0; Gaps 0;  
 QY 1200 ACCACCTATCAGG 1213  
 Db | ||||| : |||||  
 2 AGCACCCUACGAG 15  
 RESULT 494  
 ABX01757  
 ID ABX01757 standard; RNA; 15 BP.  
 AC ABX01757;  
 XX  
 XX 23-DEC-2002 (first entry)  
 XX  
 XX Hepatitis C virus (HCV) ribozyme related RNA sequence #26.  
 XX  
 XX Enzymatic nucleic acid; RNA cleavage; Hepatitis C virus infection;  
 KW HCV ribozyme; HCV expression; HCV replication; cirrhosis; virucide;  
 KW liver failure; hepatocellular carcinoma; HCV infection; drug therapy;  
 KW type I interferon; interferon alpha; interferon beta; cytostatic; ss;  
 KW interferon gamma; consensus interferon; hepatotropic; antiinflammatory.  
 XX  
 OS Unidentified.  
 XX  
 XX US2002082225-A1.  
 XX  
 XX 27-JUN-2002.  
 XX  
 XX 23-MAR-1999; 99US-00274553.  
 XX  
 XX 23-MAR-1999; 99US-00274553.  
 XX  
 XX (BLAT/) BLATT L.  
 PA (MCSW/) MCSWIGGEN J A.  
 PA (ROBE/) ROBERTS B.  
 PA (PAVC/) PAVCO P A.  
 PA (MACE/) MACEJACK D.  
 XX

PI Blatt L, Mcswiggen JA, Roberts B, Pavco PA, Macejack D;  
 XX WPI; 2002-617759/66.  
 XX  
 XX New ribozymes targeting RNA derived from hepatitis C virus inhibit viral  
 PT replication and are useful to treat hepatitis C virus infections and  
 PT cirrhosis, liver failure or hepatocellular carcinoma.  
 XX  
 XX Disclosure; SEQ ID NO 1539; 80pp; English.  
 XX  
 XX The present invention relates to enzymatic nucleic acids which  
 CC specifically cleave RNA derived from Hepatitis C virus (HCV). The  
 CC enzymatic nucleic acid or ribozyme is in a hammerhead (HH) or hairpin  
 CC (HP) motif where the binding arms comprise sequences complementary to one  
 CC of the substrate sequences defined in the specification. The HCV  
 CC ribozymes are useful for modulating the expression and/or replication of  
 CC HCV. They can be used to treat cirrhosis, liver failure and/or  
 CC hepatocellular carcinoma. The HCV ribozymes are also useful for treating  
 CC a condition associated with HCV infection in conjunction with one or more  
 CC interferon alpha, beta or gamma or consensus interferon. The present  
 CC sequence represents a RNA sequence of unknown function. Note: The present  
 CC sequence is given in the sequence data but is not mentioned elsewhere in  
 CC the specification. The complete sequence data for this patent was  
 CC obtained in electronic format directly from the USPTO web site at  
 CC seqdata.uspto.gov/psipsDIDEntry.html  
 XX  
 XX Sequence 15 BP; 4 A; 6 C; 3 G; 0 T; 2 U; 0 Other;  
 SQ  
 Query Match 0.6%; Score 12.4; DB 1; Length 15;  
 Best Local Similarity 78.6%; Pred. No. 3.6e+02;  
 Matches 11; Conservative 2; Mismatches 1; Indels 0; Gaps 0;  
 QY 1200 ACCACCTATCAGG 1213  
 Db | ||||| : |||||  
 1 AGCACCCUACGAG 14  
 RESULT 495  
 ABX93418/c  
 ID ABX93418 standard; DNA; 15 BP.  
 AC ABX93418;  
 XX  
 XX 27-MAY-2003 (first entry)  
 XX  
 XX Sequence specific duplex binding oligonucleotide #1.  
 XX  
 XX Triplex DNA; internucleoside linkage; oligonucleotide-based diagnosis;  
 KW triplex binding; absorption matrix; immobilised enzyme; process control;  
 KW immunoassay reagent; pendant functionality; cation exchange agent;  
 KW molecular sieve; textile; fibre; film; formed article; ss;  
 KW polyfunctional surfactant; triplex affinity capture purification.  
 XX  
 OS Synthetic.  
 XX  
 XX US6495672-B1.  
 XX  
 XX 17-DEC-2002.  
 XX  
 XX 21-NOV-2000; 2000US-00717422.  
 XX  
 XX 09-AUG-1996; 96US-0023241P.  
 PR 05-AUG-1997; 97US-00906378.  
 XX  
 XX (ISIS-) ISIS PHARM INC.  
 XX  
 XX Froehler BC, Gutierrez AJ, Matteucci MD;  
 XX WPI; 2003-340428/32.  
 XX  
 XX New oligonucleotide compound with internucleoside linkages useful in  
 PT oligonucleotide-based diagnosis comprises at least one nucleoside

selected from 2-aminopyridine or 2-pyridone C-nucleosides.  
Example 7; Col 24; 17pp; English.

The invention describes an oligonucleotide compound with internucleoside linkages comprising at least one nucleoside. The compounds are used in oligonucleotide-based diagnosis to detect presence or absence of target gene sequences to which they specifically bind and separation through triplex binding. They are also useful as linkers or spacers in preparing absorption matrices, immobilised enzymes for process control or immunoassay reagents; as monomers to provide access to polymers having pendant functionalities; as cation exchange agents in the preparation of molecular sieves, textiles, fibres, films and formed articles; and as polyfunctional surfactants. The composition improves triplex affinity capture purification and enhances triplex binding. This sequence represents a novel oligonucleotide capable of binding to a polynucleotide duplex to form a triplex structure useful in diagnosis

Sequence 15 BP; 0 A; 6 C; 0 G; 9 T; 0 U; 0 Other;  
Query Match 0.6%; Score 12.4; DB 1; Length 15;  
Best Local Similarity 92.9%; Pred. No. 3.6e+02;  
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1016 AAAAAGAGGGGAG 1029  
Db 15 AAAAAGAGGGGAG 2

RESULT 496  
ABX16337/C  
ID ABX16337 standard; DNA; 15 BP.  
XX AC ABX16337;  
XX DT 24-APR-2003 (first entry)  
XX DE DNase footprint target sequence, Select I.  
XX KW DNase footprint; ds; target; 2-aminopyridine C-nucleoside;  
XX KW 2-pyridone C-nucleoside; triple helix; cation exchange agent;  
XX KW molecular sieve; textile; fibre; film; formed article;  
XX KW polyfunctional surfactant; phase transfer agent;  
XX KW phase transfer catalyst; liquid/liquid ion extraction;  
XX KW optically active material; affinity absorption matrix;  
XX KW immobilised enzyme; immunoassay reagent.  
XX OS Synthetic.  
XX PN US6447998-B1.  
XX PD 10-SEP-2002.  
XX PF 05-AUG-1997; 97US-00906378.  
XX PR 09-AUG-1996; 96US-0023241P.  
XX PA (ISIS-) ISIS PHARM INC.  
XX PI Froehler BC, Gutierrez AJ, Matteucci MD;  
XX DR WPI; 2003-196641/19.  
XX PT Novel 2-aminopyridine C-nucleoside or 2-pyridone C-nucleoside compound  
XX PT useful for preparing oligonucleotides which are used for detecting  
XX PT specific DNA duplexes in samples.  
XX PS Example 7; Col 23; 18pp; English.  
XX CC The invention relates to a 2-aminopyridine C-nucleoside or 2-pyridone C-nucleoside compound, its salt, solvates, resolved enantiomers or purified diastereomers of formula detailed in the specification. Also included is an oligomer compound comprising a multiplicity of nucleosides linked by

internucleoside linkages where at least one nucleoside is a modified nucleoside comprising a 2-aminopyridine C-nucleoside or 2-pyridone C-nucleoside, its salts, solvates, resolved enantiomers or purified diastereomers. The oligomer is useful for detecting the presence, absence or amount of a particular DNA duplex in a sample suspected of containing DNA. The method involves contacting the sample with the oligomer under conditions where a triple helix is formed between the oligomer and the particular DNA duplex. The 2-aminopyridine C-nucleoside or 2-pyridone C-nucleoside compound is useful for preparing oligonucleotides which are useful in oligonucleotide-based diagnosis and separation through triplex binding, as monomers to provide access to polymers having unique pendant functionalities, as comonomers with monomers, for preparing polymers (which are useful as cation exchange agents in the preparation of polyfunctional surfactants, as phase transfer agents, in phase transfer catalysis and liquid/liquid ion extraction, in the synthesis or resolution of other optically active materials, and as linkers or spacers in preparing affinity absorption matrices, immobilised enzymes for process control, or immunoassay reagents. The present sequence is a target sequence (contained in a 370bp restriction fragment) for modified oligonucleotides containing 2-aminopyridine C-nucleoside or 2-pyridone C-nucleosides, used in a DNase footprint assay

Sequence 15 BP; 0 A; 6 C; 0 G; 9 T; 0 U; 0 Other;  
Query Match 0.6%; Score 12.4; DB 1; Length 15;  
Best Local Similarity 92.9%; Pred. No. 3.6e+02;  
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1016 AAAAAGAGGGGAG 1029  
Db 15 AAAAAGAGGGGAG 2

RESULT 497  
ABZ75384  
ID ABZ75384 standard; DNA; 15 BP.  
XX AC ABZ75384;  
XX DT 07-MAY-2003 (first entry)  
XX DE Synthetic nuclease-resistant oligomeric compound #40.  
XX KW Nuclease resistant; ds; pharmaceutical; topical administration;  
XX KW transdermal patch; enzymatic degradation resistant.  
XX OS Synthetic.  
XX PN WO2003004602-A2.  
XX PD 16-JAN-2003.  
XX PF 01-JUL-2002; 2002WO-US020934.  
XX PR 03-JUL-2001; 2001US-0302682P.  
XX PR 28-NOV-2001; 2001US-00996292.  
XX PR 10-DEC-2001; 2001US-00013295.  
XX PA (ISIS-) ISIS PHARM INC.  
XX PI Manoharan M, Maier MA, Prakash TP, Rajeev KG;  
XX DR WPI; 2003-256318/25.  
XX PT Nuclease-resistant oligomeric compound useful as pharmaceuticals for  
XX PT topical administration such as transdermal patches.  
XX PS Example 58; Page 104; 234pp; English.  
XX CC The invention relates to novel nuclease-resistant oligomeric compounds.  
XX CC The compounds of the invention are useful as pharmaceuticals for topical  
XX CC administration such as transdermal patches. The oligomeric compound is

CC resistant to enzymatic degradation. The sequences shown in ABZ75345-  
 CC ABZ75399 represent the nuclease-resistant compounds of the invention  
 XX  
 SQ Sequence 15 BP; 9 A; 0 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 15;  
 Best Local Similarity 92.9%; Pred. No. 3.6e+02;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1016 AAAAAGAGGGGAG 1029  
 DB 1 AAAAAGAGGGGAG 14

RESULT 498  
 ADC13352  
 ID ADC13352 standard; DNA; 15 BP.  
 AC ADC13352;  
 XX 18-DEC-2003 (first entry)  
 DT  
 DE KS3 and KS4 SAGE library over-expression showing tag, SEQ ID No 19.  
 XX  
 KW marker gene; tumour; Kaposi's Sarcoma; peripheral blood mononuclear cell;  
 KW PMBC; expressed keratin 14; TIE 1; Saliadhesin; Siglec 1; angiogenesis;  
 KW drug target; tag; SAGE library; KS3; KS4; ss.  
 XX  
 OS Unidentified.  
 XX  
 PN EP1298221-A1.  
 XX  
 PD 02-APR-2003.  
 XX  
 PE 28-SEP-2001; 2001EP-00203703.  
 XX  
 PR 28-SEP-2001; 2001EP-00203703.  
 XX  
 PA (PRIM-) PRIMAGEN HOLDING BV.  
 XX  
 PI Van Der Kuyt AC, Cornelissen M;  
 XX  
 DR WPI; 2003-589342/56.

XX  
 PT Determining whether a treatment is effective in changing a status of a  
 PT certain set of target cells in an individual comprises determining  
 PT whether the sample comprises an expression product of at least one marker  
 PT gene.

PS Disclosure; SEQ ID NO 19; 94pp; English.  
 CC  
 CC The invention relates to a novel method for determining whether a  
 CC treatment is effective in changing a status of a certain set of target  
 CC cells in an individual. The method comprises obtaining a sample from an  
 CC individual after initiation of the treatment; and determining whether the  
 CC sample comprises an expression product of at least one marker gene. The  
 CC marker gene and a proteinaceous molecule (which can bind to the protein  
 CC derived from the marker gene of the invention) are useful for determining  
 CC whether a treatment is effective in counteracting a tumour in an  
 CC individual, especially Kaposi's Sarcoma. Peripheral blood mononuclear  
 CC cell (PMBC) expressed keratin 14, TIE 1, Saliadhesin, or Siglec 1  
 CC sequences or a fully defined sequence given in the specification, or  
 CC their analogues are useful as indicators for angiogenesis and for  
 CC detecting the presence of a tumour cell in an individual. The expression  
 CC product of a gene comprising a marker gene of the invention is useful as  
 CC a drug target. The compound is useful for preparing a medicament. This  
 CC polynucleotide sequence represents a tag sequence which showed over-  
 CC expression in Kaposi's Sarcoma SAGE libraries KS3 and KS4 of the  
 CC invention.

XX  
 SQ Sequence 15 BP; 4 A; 3 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 15;

Best Local Similarity 92.9%; Pred. No. 3.6e+02;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 760 CATGCAGGTTTCTT 773  
 DB 1 CATGCAGGTTTCTT 14

RESULT 499  
 AAA93899  
 ID AAA93899 standard; DNA; 16 BP.  
 XX  
 AC AAA93899;  
 XX  
 DT 15-JAN-2001 (first entry)  
 XX  
 DE Beta-3-Gla T3 exon 1 splice site sequence.  
 XX  
 KW Beta-1,3 galactose transferase; treatment; diagnosis; cancer; human;  
 KW digestive system; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WC200050608-A1.  
 XX  
 PD 31-AUG-2000.  
 XX  
 PF 24-FEB-2000; 2000WO-JP001070.  
 XX  
 PR 25-FEB-1999; 99JP-00047571.  
 XX  
 PA (KYOW ) KYOWA HAKKO KOGYO KK.  
 XX  
 PI Narimatsu H, Isshiki S, Togayachi A, Sasaki K;  
 XX  
 DR WPI; 2000-549409/50.

PT Beta-1,3 galactose transferase and DNA encoding it, useful for synthesis  
 PT of type 1 sialyl Lewis, a carbohydrate for treatment of digestive system  
 PT cancer.  
 XX  
 PS Example 5; Page 79; 123pp; Japanese.  
 XX  
 CC This invention relates to a polypeptide (I) with beta-1,3 galactose  
 CC transferase activity, or variants of (I) comprising amino acid additions,  
 CC deletions and/or substitutions. Included in the invention is DNA encoding  
 CC all or part of (I); expression vectors containing the DNA, host cells  
 CC transformed by the vectors; a method for the preparation of the  
 CC polypeptide by culture of the transformants or by expression in the milk  
 CC of a transgenic mammal, and antibodies recognising (I). The Beta-1,3  
 CC galactose transferase protein transfers galactose by beta-1,3 bonding to  
 CC N-acetylglucosamine present in a non-cyclic carbohydrate chain (such as  
 CC GlcNAc-beta1-3Gal-beta1-4Glc) to give Gal-beta1-3GlcNAc. The protein and DNA  
 CC encoding it are useful for the treatment and diagnosis of cancer of the  
 CC digestive system. The present sequence represents a Beta-Gal-T5 exon  
 CC intron boundary splice site sequence

XX  
 SQ Sequence 16 BP; 3 A; 4 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 16;  
 Best Local Similarity 92.9%; Pred. No. 4.4e+02;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 759 CCATGCAGGTTTCTT 772  
 DB 1 CCAAGCAGGTTTCTT 14

RESULT 500  
 AAS56856/c  
 ID AAS56856 standard; DNA; 16 BP.  
 XX  
 AC AAS56856;

XX 16-JAN-2002 (first entry)  
 XX Validation ribozyme DNA sequence #30.  
 XX Human: BRCA-1 regulator; ribozyme; BR1; RNA target recognition; probe;  
 KW cytosolic; RNA cleavage; tumour suppressor; PCR primer; CHLR2; AF6; BR2;  
 KW inhibitor dominant negative 4; breast basic conserved protein 1; BBCL1;  
 KW BR3; ID4; cancer; proliferative disorder; tumour proliferation; ss.  
 XX Homo sapiens.  
 OS  
 XX WO200170982-A2.  
 XX 27-SEP-2001.  
 XX 23-MAR-2001; 2001WO-US009559.  
 XX 23-MAR-2000; 2000US-00536058.  
 XX (IMMU-) IMMUSOL INC.  
 PA (BEGE/) BEGER C.  
 PI Begier C, Barber J, Wong-Staal F;  
 XX WPI; 2001-611503/70.  
 XX Novel polypeptides that are the regulators of BRCA-1, useful for treating  
 PT cancer and diagnosing the presence of neoplastic cells in biological  
 PT sample.  
 XX Disclosure; Fig 8; 97pp; English.  
 XX Sequences AAS56729-AAS5968 represent DNA encoding BRCA-1 regulators,  
 CC ribozyme target recognition RNA sequences, DNA fragments encoding the RNA  
 CC and primers used in the methods of the invention. Hybridisation of  
 CC ribozymes to their targets results in cleavage of the RNA target. The  
 CC ribozymes can be used to cleave regulators of the tumour suppressor BRCA-  
 CC 1, resulting in upregulation or downregulation of BRCA-1 in a cell. The  
 CC mRNA targets include those encoding the BRCA-1 regulator BR1, inhibitor  
 CC dominant negative 4 (ID4), breast basic conserved protein 1 (BBCL1),  
 CC CHLR2, AF6, BR2 and BR3. Regulation of BRCA-1 is useful for treating and  
 CC diagnosing cancer and other proliferative disorders. The severity of an  
 CC incidence of cancer can be lessened by regulating tumour proliferation  
 CC through modulation of BRCA-1 expression. The sequences of the invention  
 CC are useful in the development of anti-cancer drugs  
 XX Sequence 16 BP; 0 A; 2 C; 6 G; 8 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.6%; Score 12.4; DB 1; Length 16;  
 Best Local Similarity 92.9%; Pred. No. 4.4e+02;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 734 AGAAACAGAACACC 747  
 |||||  
 Db 15 AGAAACAGAACACC 2  
 RESULT 501  
 ABK02379  
 ID ABK02379 standard; RNA; 17 BP.  
 AC  
 XX ABK02379;  
 XX 12-MAR-2002 (first entry)  
 XX Human NOGO Amberzyme #51.  
 XX Human; ss; antisense therapy; cytosolic; antiinflammatory; haemostatic;  
 KW cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;  
 KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;  
 KW DNAzyme; inozyme; G-cleaver; amberzyme; zinczyme; lymphoma; leukaemia;  
 KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;  
 KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;  
 KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;  
 KW inflammatory arthropathy; central nervous system injury;  
 KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;  
 KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;  
 KW Parkinson's disease; ataxia; Huntington's disease;  
 KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.  
 XX Homo sapiens.  
 OS Synthetic.  
 XX WO200159103-A2.  
 XX 16-AUG-2001.  
 XX 09-FEB-2001; 2001WO-US004273.  
 XX 11-FEB-2000; 2000US-0181797P.  
 XX 28-FEB-2000; 2000US-0185516P.  
 PR 06-MAR-2000; 2000US-0187128P.  
 XX (RIBO-) RIBOZYME PHARM INC.  
 PA (BLAT/) BLATT L.  
 PA (MCSW/) MCSWIGGEN J.  
 PA (CHOW/) CHOWIRRA B M.  
 XX Blatt L, Mcswiggen J, Chowirra BM;  
 PI WPI; 2001-607195/69.  
 XX Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense  
 PT constructs, which down regulate expression of a CD20 gene or neurite  
 PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and  
 PT central nervous system injury.  
 PT Claim 88; Page 131; 200pp; English.  
 XX The invention relates to a nucleic acid molecule which down regulates  
 CC expression of a CD20 gene and a nucleic acid molecule which down  
 CC regulates expression of a neurite growth inhibitor gene (NOGO). The  
 CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a  
 CC DNAzyme) an inozyme (an endolytic nucleic acid cleaving an RNA molecule  
 CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NIN motif) or  
 CC an amberzyme (cleaving RNA with an NGN triplet), a zinczyme (cleaving RNA  
 CC with a VGY motif). The CD20-targeting nucleic acid is used to cleave RNA  
 CC of CD20 in the presence of a divalent cation that is preferably Mg<sup>2+</sup>.  
 CC Furthermore, it may be contacted with a cell to reduce CD20 activity of  
 CC the cell and treat a patient having a condition associated with the level  
 CC of CD20. The treatment may further comprise the use of one or more  
 CC therapies. In particular, the CD20 targeting nucleic acid may be used to  
 CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-  
 CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic  
 CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell  
 CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,  
 CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-  
 CC targeting nucleic acid is used to cleave RNA of the NOGO gene in the  
 CC presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, the  
 CC nucleic acid may be contacted with a cell to reduce NOGO activity of the  
 CC cell and treat a patient having a condition associated with the level of  
 CC NOGO. The treatment may further comprise the use of one or more  
 CC therapies. In particular, the NOGO-targeting nucleic acid may be used to  
 CC treat central nervous system (CNS) injury and cerebrovascular accident  
 CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),  
 CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),  
 CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob  
 CC disease, muscular dystrophy, and/or other neurodegenerative disease  
 CC states which respond to the modulation of NOGO expression. The present  
 CC sequence is an amberzyme molecule of the invention  
 XX Sequence 17 BP; 3 A; 2 C; 9 G; 0 T; 3 U; 0 Other;  
 SQ  
 Query Match 0.6%; Score 12.4; DB 1; Length 17;  
 Best Local Similarity 71.4%; Pred. No. 5.3e+02;



Matches 10; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 1506 GCTGGAGTCTGG 1519  
 ||:||||:|:|  
 Db 3 GCUGAGGUGCUG 16

RESULT 502  
 AAT81535/C  
 ID AAT81535 standard; RNA; 17 BP.  
 XX  
 AC AAT81535;  
 XX  
 XX 14-DEC-1997 (first entry)  
 DT  
 XX  
 XX Human c-myb hammerhead ribozyme target sequence (nt. position 2816).  
 DE  
 XX  
 XX Enzymatic nucleic acid; hammerhead; ribozyme; cleavage; human;  
 KW  
 KW smooth muscle cell; hyperproliferation; restenosis; cancer; c-myb;  
 KW  
 XX coronary angioplasty; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX W09531541-A2.  
 DN  
 XX 23-NOV-1995.  
 PD  
 XX  
 XX 18-MAY-1995; 95WO-US006368.  
 PF  
 XX  
 XX 18-MAY-1994; 94US-00245466.  
 PR  
 PR 13-JAN-1995; 95US-00373124.  
 XX  
 XX (RIBO-) RIBOZYME PHARM INC.  
 PA  
 XX  
 XX Stinchcomb DT, Draper K, Meswiggen J, Jarvis T;  
 PI  
 XX WPI; 1996-010927/01.  
 DR  
 XX  
 XX New enzymatic nucleic acid molecules - cleave RNA produced by e.g. c-myb,  
 PT  
 PT for treating restenosis or cancer.  
 PT  
 XX  
 XX Claim 1; Page 77; 128pp; English.  
 PS  
 XX  
 XX The present sequence represents the preferred target sequence for an  
 CC  
 CC enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves  
 CC the human c-myb sequence at the base position indicated in the descriptor  
 CC line. The c-myb sequence was screened for optimal ribozyme target sites  
 CC using a computer folding algorithm, and regions of the mRNA which did not  
 CC form secondary folding structures and contained potential ribozyme  
 CC cleavage sites were identified. Ribozymes were synthesised and their  
 CC activities optimised by either varying the length of the binding arms or  
 CC by modification to prevent degradation by nucleases. The ribozymes cleave  
 CC the c-myb sequence and can be used to prevent smooth muscle cell  
 CC hyperproliferation in restenosis, especially after coronary angioplasty,  
 CC and in cancers  
 XX  
 SQ Sequence 17 BP; 3 A; 2 C; 9 G; 0 T; 3 U; 0 Other;  
 Query Match 0.6%; Score 12.4; DB 1; Length 17;  
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 977 CCAAGCTCTACTCC 990  
 |||||  
 Db 17 CCAAGCTCTACTGC 4

RESULT 503  
 AAX75237/C  
 ID AAX75237 standard; RNA; 17 BP.  
 XX  
 AC AAX75237;  
 XX

28-JUL-1999 (first entry)  
 Mouse flt-1 VEGF receptor hammerhead ribozyme substrate #765.  
 Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;  
 KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;  
 tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;  
 fms-like tyrosine kinase 1; kinase insert domain containing receptor;  
 foetal liver kinase 1; ss.  
 Mus sp.  
 WO9715662-A2.  
 01-MAY-1997.  
 25-OCT-1996; 96WO-US017480.  
 26-OCT-1995; 95US-0005974P.  
 11-JAN-1996; 96US-00584040.  
 (RIBO-) RIBOZYME PHARM INC.  
 (CHIR ) CHIRON CORP.  
 Pavco P, Meswiggen J, Stinchcomb D, Escobedo J;  
 WPI; 1997-259017/23.  
 Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA  
 stability - useful for treating e.g. tumour angiogenesis, psoriasis,  
 rheumatoid arthritis, etc., in a human patient.  
 Claim 4; Page 178; 218pp; English.  
 The present invention describes nucleic acid molecules which modulate the  
 synthesis, expression and/or stability of a mRNA encoding 1 or more  
 receptors of vascular endothelial growth factor (VEGF). A patient  
 (preferably human) having a condition associated with the level of the  
 fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing  
 receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour  
 angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be  
 treated by administering the nucleic acid molecule or the expression  
 vector to the patient. AAX67275 to AAX75752 represent specific examples  
 of nucleic acid molecules from the present invention  
 Sequence 17 BP; 4 A; 6 C; 4 G; 0 T; 3 U; 0 Other;  
 Query Match 0.6%; Score 12.4; DB 1; Length 17;  
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1166 GTCCCAACTTTGGG 1179  
 |||||  
 Db 14 GTCCCAACTTTGGG 1

RESULT 504  
 AAX69007/C  
 ID AAX69007 standard; RNA; 17 BP.  
 XX  
 AC AAX69007;  
 XX  
 XX 28-JUL-1999 (first entry)  
 DT  
 XX  
 XX Human flt1 VEGF receptor hammerhead ribozyme substrate #302.  
 DE  
 XX  
 XX Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;  
 KW  
 KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;  
 KW  
 KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;  
 KW  
 KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;  
 KW  
 KW foetal liver kinase 1; ss.  
 XX  
 OS Homo sapiens.

```

XX  WO9715662-A2.
PN
XX
XX  01-MAY-1997.
PD
XX
XX  25-OCT-1996; 96WO-US017480.
PF
XX
XX  26-OCT-1995; 95US-0005974P.
PR
XX  11-JAN-1996; 96US-00584040.
PR
XX
XX  (RIBO-) RIBOZYME PHARM INC.
PA
XX  (CHIR ) CHIRON CORP.
PA
XX
XX  Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;
PI
XX
XX  WPI; 1997-259017/23.
DR
XX
XX  Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT
PT  stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT  rheumatoid arthritis, etc., in a human patient.
PT
XX
XX  Claim 4; Page 55; 218pp; English.
PS
XX
XX  The present invention describes nucleic acid molecules which modulate the
CC
CC  synthesis, expression and/or stability of a mRNA encoding 1 or more
CC  receptors of vascular endothelial growth factor (VEGF). A patient
CC  (preferably human) having a condition associated with the level of the
CC  fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC  receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC  angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC  treated by administering the nucleic acid molecule or the expression
CC  vector to the patient. AAX67275 to AAX75752 represent specific examples
CC  of nucleic acid molecules from the present invention
XX
XX  Sequence 17 BP; 6 A; 1 C; 5 G; 0 T; 5 U; 0 Other;
SQ
Query Match 0.6%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 5.3e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1163 ACTGTCCCAACTTT 1176
DB 17 ACAGTCCCAACTTT 4
RESULT 505
AAX62347/C
ID AAX62347 standard; RNA; 17 BP.
XX
XX  AAX62347;
AC
XX
XX  16-JUL-1999 (first entry)
DT
XX
XX  Granule bound starch synthase hammerhead substrate SEQ ID NO:222.
DE
XX
XX  Maize; corn; Zea mays; delta-9 desaturase; GBSS; target; substrate;
KW  granule bound starch synthase; hammerhead ribozyme; hairpin ribozyme;
KW  modulation; gene expression; transgenic plant; cleavage; canola plant;
KW  caffeine synthesis; coffee plant; nicotine production; tobacco;
KW  fruit ripening; flower pigmentation; lignin production; ss.
XX
XX  Zea mays.
OS
XX
XX  WO9710328-A2.
PN
XX
XX  20-MAR-1997.
PD
XX
XX  12-JUL-1996; 96WO-US011689.
PF
XX
XX  13-JUL-1995; 95US-0001135P.
PR
XX
XX  (RIBO-) RIBOZYME PHARM INC.
PA
XX  (DOWC ) DOWELANCO.
PA
XX
XX  Zwick MG, Edington BE, Mcswiggen JA, Merlo PAO, Guo L, Skokut TA;
PI
XX  Young SA, Folkerts O, Merlo DJ;
XX
XX  WPI; 1997-202224/18.
DR
XX
XX  Ribozyme which modulates plant gene expression - preferably modulates
PT
PT  expression of DELTA-9 desaturase or granule bound starch synthase in
PT  maize or canola.
PT
XX
XX  Claim 41; Page 75; 155pp; English.
PS
XX
XX  The present invention describes an enzymatic nucleic acid molecule (I)
CC
CC  with RNA cleaving activity, which modulates the expression of a plant
CC  gene. Also described is a gene comprising a cDNA sequence encoding maize
CC  Delta-9 desaturase. (I) can be used to modulate expression of a gene,
CC  preferably Delta-9 desaturase or a granule bound starch synthase (GBSS)
CC  gene, in a plant (preferably a maize or canola plant). (I) can be used to
CC  modulate caffeine synthesis in a coffee plant, nicotine production in a
CC  tobacco plant, fruit ripening processes in an apple, tomato, pear, plum
CC  or peach plant, flower pigmentation in a rose, petunia, chrysanthemum or
CC  marigold plant or lignin production in a tobacco, aspen, poplar or pine
CC  plant
XX
XX  Sequence 17 BP; 4 A; 4 C; 8 G; 0 T; 1 U; 0 Other;
SQ
Query Match 0.6%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 5.3e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1241 TCGCTCCGACCCC 1254
DB 17 TCGCTTCGACCCC 4
RESULT 506
AAX97280/C
ID AAX97280 standard; RNA; 17 BP.
XX
XX  AAX97280;
AC
XX
XX  17-MAR-1999 (first entry)
DT
XX
XX  Human EGF-R target sequence nucleotide position 456.
DE
XX
XX  Human; epidermal growth factor receptor; EGFR; EGF-R; target sequence;
KW  hammerhead ribozyme; hairpin ribozyme; inhibition; cell proliferation;
KW  cancer; genetic drift; detection; mutation; ss.
XX
XX  Homo sapiens.
OS
XX
XX  WO9833893-A2.
PN
XX
XX  06-AUG-1998.
PD
XX
XX  14-JAN-1998; 98WO-US000730.
PF
XX
XX  31-JAN-1997; 97US-0036476P.
PR
XX  04-DEC-1997; 97US-00985162.
PR
XX  (RIBO-) RIBOZYME PHARM INC.
PA  (UYAS-) UNIV ASTON.
PA
XX
XX  Akhtar S, Fell P, Mcswiggen JA;
PI
XX
XX  WPI; 1998-437449/37.
DR
XX
XX  Enzymatic nucleic acids - which cleave RNA derived from an epidermal
PT  growth factor receptor, useful for inhibiting cell proliferation and for
PT  treating cancers.
PT
XX
XX  Claim 5; Page 69; 109pp; English.
PS
XX
XX

```

CC The present invention describes enzymatic cleavage of nucleic acid molecules (NAMS) which specifically cleave RNA derived from an epidermal growth factor receptor (EGF-R) gene. AAV97221 to AAV98043 and AAV98979 to AAV99090 represent specifically claimed target sequences from human EGF-R. AAV98044 to AAV98866 and AAV98867 to V9878 represent hammerhead ribozymes and hairpin ribozymes respectively for human EGF-R. The NAMS are useful for cleaving EGF-R RNA in the treatment of a condition associated with EGFR expression levels e.g. to inhibit cell proliferation in the prevention or treatment of cancers. The NAMS can also be used as diagnostic tools to examine genetic drift and mutations within diseased cells or to detect the presence of EGF-R RNA in a cell

XX SQ Sequence 17 BP; 2 A; 6 C; 2 G; 0 T; 7 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 17;

Best Local Similarity 92.9%; Pred. No. 5.3e+02;

Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 863 AGGCGACTGAGGAC 876

Db 17 AGGCGACTGAGGAC 4

RESULT 507

AAAX76129/c

ID AAX76129 standard; DNA; 17 BP.

XX AC AAX76129;

XX DT 03-AUG-1999 (first entry)

XX DE Human Toso protein PCR primer #6.

XX KW Toso protein; tumour necrosis factor mediated apoptosis inhibition;

XX KW TNF mediated apoptosis; T cell overactivity; autoimmune disease;

XX KW Sjogrens connective tissue disorder; transplant rejection; cancer;

XX KW PCR primer; ss.

XX OS Synthetic.

XX OS Homo sapiens.

XX PN WO9925832-A1.

XX PD 27-MAY-1999.

XX PF 16-NOV-1998; 98WO-US024391.

XX PR 17-NOV-1997; 97US-0066063P.

XX PR 17-AUG-1998; 98US-00135238.

XX PA (STRD ) UNIV LELAND STANFORD JUNIOR.

XX PI Nolan GP, Hitoshi Y;

XX PT WPI; 1999-338007/28.

XX PS DNA encoding Toso, a protein having inhibitory effects on TNF mediated

XX PT apoptosis.

XX PS Example 4; Page 43; 70pp; English.

XX CC The present invention describes a Toso protein (I). (I) has anti-

XX CC apoptotic and cytostatic activity. Toso (named after a Japanese liquor

XX CC that is drunk on New Year's Day to celebrate long life and eternal youth)

XX CC most likely acts by induction of cFLIP expression which inhibits caspase-

XX CC 8 processing. Recombinant (I) can be used to modulate apoptosis in a cell

XX CC or to treat an apoptosis related condition in a mammal. Apoptosis related

XX CC conditions can also be treated by administration of the Toso protein or

XX CC antibody. Apoptosis related or mediated conditions that can be treated

XX CC include diseases characterized by T cell overactivity, e.g. Sjogrens

XX CC connective tissue disorder, autoimmune diseases, diseases where T cells

XX CC actively destroy cells, including transplant rejection and conditions

XX CC where cells of any kind that are not dying express Toso appropriately,

CC e.g. cancer of T or B cell origin (where increased apoptosis would be

CC appropriate). The present sequence represents a PCR primer used in an

CC example from the present invention

XX SQ Sequence 17 BP; 2 A; 2 C; 9 G; 4 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 17;

Best Local Similarity 92.9%; Pred. No. 5.3e+02;

Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1253 CCATCCCCAACCCC 1266

Db 16 CTATCCCCAACCCC 3

RESULT 508

AAA23121

ID AAA23121 standard; RNA; 17 BP.

XX AC AAA23121;

XX DT 19-JUN-2000 (first entry)

XX DE Integrin subunit beta 3 substrate sequence SEQ ID NO:6347.

XX KW Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;

XX KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;

XX KW hammerhead ribozyme; angiogenic factor; cytosolic; antidiabetic;

XX KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;

XX KW dermatologic; RNA cleavage; cancer; diabetic retinopathy; arthritis;

XX KW age related macular degeneration; inflammation; neovascular glaucoma;

XX KW myopic degeneration; psoriasis; verruca vulgaris; angiobroma;

XX KW tuberosus sclerosis; pot-wine stain; Sturge Weber syndrome;

XX KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.

XX OS Homo sapiens.

XX PN WO9950403-A2.

XX PD 07-OCT-1999.

XX PF 24-MAR-1999; 99WO-US006507.

XX PR 27-MAR-1998; 98US-0079678P.

XX PA (RIBO-) RIBOZYME PHARM INC.

XX PI Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;

XX PT WPI; 1999-591315/50.

XX PS Novel ribozymes for modulating the synthesis, expression and/or stability

XX PT of an mRNA encoding an angiogenic factors.

XX PS Claim 54; Page 263; 305pp; English.

XX CC The present invention describes enzymatic cleavage of nucleic acid molecules with RNA

XX CC cleaving activity, which specifically cleave RNA encoded by an aryl

XX CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3

XX CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to

XX CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,

XX CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their

XX CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to

XX CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086

XX CC and AAA19155 to AAA19222 represent their corresponding target sequences;

XX CC AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme

XX CC sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and

XX CC AAA21596 to AAA21688 represent their corresponding target sequences;

XX CC AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme

XX CC for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to

XX CC AAA23422 represent their corresponding target sequences. The ribozymes of

XX CC the invention are used for modulating the synthesis, expression and/or

XX CC stability of an mRNA encoding angiogenic factor, especially ARNT,



CC risk of an apoptosis related condition. The methods are useful for  
 CC identifying agents capable of diagnosing and treating apoptosis related  
 CC disease, their use for modulating apoptosis, and methods for diagnosing  
 CC the disease state. The present sequence represents a PCR primer for the  
 CC human Toso protein, which is used in an example from the present  
 CC invention  
 CC  
 XX Sequence 17 BP; 2 A; 2 C; 9 G; 4 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.6%; Score 12.4; DB 1; Length 17;  
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1253 CCATCCCAACCCC 1266  
 Db 16 CTATCCCAACCCC 3  
 RESULT 511  
 AAF07187  
 ID AAF07187 standard; DNA; 17 BP.  
 XX  
 AC AAF07187;  
 XX  
 DT 16-FEB-2001 (first entry)  
 DE Hammerhead ribozyme substrate #3444.  
 XX  
 XX Ribozyme; erythropoietin; granulocyte colony stimulating factor;  
 KW interferon alpha; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2000061729-A2.  
 PD 19-OCT-2000.  
 XX  
 PF 11-APR-2000; 2000WO-US009721.  
 XX  
 PR 12-APR-1999; 99US-0129390P.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 XX  
 PI Blatt L, Zwick M, Pavco P, Mcswiggen J;  
 DR WPI; 2000-647423/62.  
 XX  
 PT Enzymatic and antisense nucleic acid inhibition of repressor genes,  
 KW useful for producing e.g. granulocyte colony stimulating factor protein,  
 KW interferon alpha; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2000061729-A2.  
 PD 19-OCT-2000.  
 XX  
 PF 11-APR-2000; 2000WO-US009721.  
 XX  
 PR 12-APR-1999; 99US-0129390P.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 XX  
 PI Blatt L, Zwick M, Pavco P, Mcswiggen J;  
 DR WPI; 2000-647423/62.  
 XX  
 PT Enzymatic and antisense nucleic acid inhibition of repressor genes,  
 KW useful for producing e.g. granulocyte colony stimulating factor protein,  
 KW interferon alpha and erythropoietin.  
 XX  
 PS Claim 54; Page 135; 164pp; English.  
 XX  
 CC The present invention relates to enzymatic and antisense nucleic acid  
 CC molecules that act as inhibitors of the expression of repressor genes  
 CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription  
 CC factor gene, IRF-2 and/or the CAAAT Displacement Protein (CDP).  
 CC Inhibition of the repressors removes prevents inhibition (and  
 CC consequently increases expression of) genes involved in the production of  
 CC erythropoietin, granulocyte colony stimulating factor protein and  
 CC interferon alpha  
 CC  
 XX Sequence 17 BP; 3 A; 8 C; 2 G; 4 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.6%; Score 12.4; DB 1; Length 17;  
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1066 CCAAGCTTCAGTCC 1079  
 Db 1 CCAAGCTTCGTGCC 14

RESULT 512  
 AAF01953  
 ID AAF01953 standard; DNA; 17 BP.  
 XX  
 AC AAF01953;  
 XX  
 DT 16-FEB-2001 (first entry)  
 DE Hammerhead ribozyme substrate #249.  
 XX  
 XX Ribozyme; erythropoietin; granulocyte colony stimulating factor;  
 KW interferon alpha; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2000061729-A2.  
 PD 19-OCT-2000.  
 XX  
 PF 11-APR-2000; 2000WO-US009721.  
 XX  
 PR 12-APR-1999; 99US-0129390P.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 XX  
 PI Blatt L, Zwick M, Pavco P, Mcswiggen J;  
 DR WPI; 2000-647423/62.  
 XX  
 PT Enzymatic and antisense nucleic acid inhibition of repressor genes,  
 KW useful for producing e.g. granulocyte colony stimulating factor protein,  
 KW interferon alpha and erythropoietin.  
 XX  
 PS Claim 37; Page 61; 164pp; English.  
 XX  
 CC The present invention relates to enzymatic and antisense nucleic acid  
 CC molecules that act as inhibitors of the expression of repressor genes  
 CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription  
 CC factor gene, IRF-2 and/or the CAAAT Displacement Protein (CDP).  
 CC Inhibition of the repressors removes prevents inhibition (and  
 CC consequently increases expression of) genes involved in the production of  
 CC erythropoietin, granulocyte colony stimulating factor protein and  
 CC interferon alpha  
 CC  
 XX Sequence 17 BP; 4 A; 11 C; 0 G; 2 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.6%; Score 12.4; DB 1; Length 17;  
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1250 ACCCATCCCAAC 1263  
 Db 2 ACCCATCCCAAC 15  
 RESULT 513  
 ABK00748  
 ID ABK00748 standard; RNA; 17 BP.  
 XX  
 AC ABK00748;  
 XX  
 DT 12-MAR-2002 (first entry)  
 DE Human NOGO Inozyme #18.  
 XX  
 XX Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;  
 KW cerebroprotective; neurotropic; antiparkinsonian;  
 KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;  
 KW DNzyme; inozyme; G-cleaver; amberyzyme; zinzyme; lymphoma; leukaemia;  
 KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;  
 KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;  
 KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;  
 KW inflammatory arthropathy; central nervous system injury;

KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;  
 KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;  
 KW Parkinson's disease; ataxia; Huntington's disease;  
 KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.  
 XX  
 OS Homo sapiens.  
 OS Synthetic.  
 XX  
 PN WO200159103-A2.  
 XX  
 PD 16-AUG-2001.  
 XX  
 XX 09-FEB-2001; 2001WO-US004273.  
 XX  
 PR 11-FEB-2000; 2000US-0181797P.  
 PR 28-FEB-2000; 2000US-0185516P.  
 PR 06-MAR-2000; 2000US-0187128P.  
 XX  
 XX (RIBO-) RIBOZYME PHARM INC.  
 PA (BLAT/) BLATT L.  
 PA (MCSW/) MCSWIGGEN J.  
 PA (CHOW/) CHOWRIRA B M.  
 XX  
 PI Blatt L, Mcswiggen J, Chowrira BM;  
 XX WPI; 2001-607195/69.  
 XX  
 DR Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense  
 PT constructs, which down regulate expression of a CD20 gene or neurite  
 PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and  
 PT central nervous system injury.  
 XX  
 PS Claim 88; Page 78; 200pp; English.  
 XX  
 CC The invention relates to a nucleic acid molecule which down regulates  
 CC expression of a CD20 gene and a nucleic acid molecule which down  
 CC regulates expression of a neurite growth inhibitor gene (NOGO). The  
 CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a  
 CC DNzyme) an inozyme (an endolytic nucleic acid cleaving an RNA molecule  
 CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or  
 CC an ambzyme (cleaving RNA with an NGN triplet), a zynzyme (cleaving RNA  
 CC with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA  
 CC of CD20 in the presence of a divalent cation that is preferably Mg<sup>2+</sup>.  
 CC Furthermore, it may be contacted with a cell to reduce CD20 activity of  
 CC the cell and treat a patient having a condition associated with the level  
 CC of CD20. The treatment may further comprise the use of one or more  
 CC therapies. In particular, the CD20 targeting nucleic acid may be used to  
 CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-  
 CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic  
 CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell  
 CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,  
 CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-  
 CC targeting nucleic acid is used to cleave RNA of the NOGO gene in the  
 CC presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, the  
 CC nucleic acid may be contacted with a cell to reduce NOGO activity of the  
 CC cell and treat a patient having a condition associated with the level of  
 CC NOGO. The treatment may further comprise the use of one or more  
 CC therapies. In particular, the NOGO-targeting nucleic acid may be used to  
 CC treat central nervous system (CNS) injury and cerebrovascular accident  
 CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),  
 CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),  
 CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob  
 CC disease, muscular dystrophy, and/or other neurodegenerative disease  
 CC states which respond to the modulation of NOGO expression. The present  
 CC sequence is an inozyme of the invention  
 XX  
 SQ Sequence 17 BP; 3 A; 11 C; 1 G; 0 T; 2 U; 0 Other;  
 Query Match 0.6%; Score 12.4; DB 1; Length 17;  
 Best Local Similarity 85.7%; Pred No. 5.3e+02;  
 Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;  
 Qy 1254 CATCCCCAACCC 1267

Db | : ||||| ||||| 17

## RESULT 514

ABK02630/c  
ID ABK02630 standard; RNA; 17 BP.

XX AC ABK02630;

XX XX 12-MAR-2002 (first entry)

XX XX Human NOGO Amberzyme #302.

XX Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;  
 KW cerebroprotective; neuroprotective; antiparkinsonian; neuroprotective;  
 KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;  
 KW DNzyme; inozyme; G-cleaver; ambzyme; zynzyme; lymphoma; leukaemia;  
 KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;  
 KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;  
 KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;  
 KW inflammatory arthropathy; central nervous system injury;  
 KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;  
 KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;  
 KW Parkinson's disease; ataxia; Huntington's disease;  
 KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.

OS Homo sapiens.

OS Synthetic.

PN WO200159103-A2.

XX PD 16-AUG-2001.

XX PF 09-FEB-2001; 2001WO-US004273.

XX PR 11-FEB-2000; 2000US-0181797P.

XX PR 28-FEB-2000; 2000US-0185516P.

XX PR 06-MAR-2000; 2000US-0187128P.

XX XX (RIBO-) RIBOZYME PHARM INC.

PA (BLAT/) BLATT L.

PA (MCSW/) MCSWIGGEN J.

PA (CHOW/) CHOWRIRA B M.

XX PI Blatt L, Mcswiggen J, Chowrira BM;

XX DR WPI; 2001-607195/69.

XX Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense  
 PT constructs, which down regulate expression of a CD20 gene or neurite  
 PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and  
 PT central nervous system injury.

XX PS Claim 88; Page 137; 200pp; English.

XX The invention relates to a nucleic acid molecule which down regulates  
 CC expression of a CD20 gene and a nucleic acid molecule which down  
 CC regulates expression of a neurite growth inhibitor gene (NOGO). The  
 CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a  
 CC DNzyme) an inozyme (an endolytic nucleic acid cleaving an RNA molecule  
 CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or  
 CC an ambzyme (cleaving RNA with an NGN triplet), a zynzyme (cleaving RNA  
 CC with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA  
 CC of CD20 in the presence of a divalent cation that is preferably Mg<sup>2+</sup>.  
 CC Furthermore, it may be contacted with a cell to reduce CD20 activity of  
 CC the cell and treat a patient having a condition associated with the level  
 CC of CD20. The treatment may further comprise the use of one or more  
 CC therapies. In particular, the CD20 targeting nucleic acid may be used to  
 CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-  
 CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic  
 CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell  
 CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,  
 CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-  
 CC targeting nucleic acid is used to cleave RNA of the NOGO gene in the  
 CC presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, the  
 CC nucleic acid may be contacted with a cell to reduce NOGO activity of the  
 CC cell and treat a patient having a condition associated with the level of  
 CC NOGO. The treatment may further comprise the use of one or more  
 CC therapies. In particular, the NOGO-targeting nucleic acid may be used to  
 CC treat central nervous system (CNS) injury and cerebrovascular accident  
 CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),  
 CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),  
 CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob  
 CC disease, muscular dystrophy, and/or other neurodegenerative disease  
 CC states which respond to the modulation of NOGO expression. The present  
 CC sequence is an inozyme of the invention

CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-  
 CC targeting nucleic acid is used to cleave RNA of the NOGO gene in the  
 CC presence of a divalent cation that is preferably  $Mg^{2+}$ . Furthermore, the  
 CC nucleic acid may be contacted with a cell to reduce NOGO activity of the  
 CC cell and treat a patient having a condition associated with the level of  
 CC NOGO. The treatment may further comprise the use of one or more  
 CC therapies. In particular, the NOGO-targeting nucleic acid may be used to  
 CC treat central nervous system (CNS) injury and cerebrovascular accident  
 CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),  
 CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),  
 CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob  
 CC disease, muscular dystrophy, and/or other neurodegenerative disease  
 CC states which respond to the modulation of NOGO expression. The present  
 CC sequence is an amberzyme molecule of the invention  
 CC  
 CC Sequence 17 BP; 5 A; 1 C; 8 G; 0 T; 3 U; 0 Other;  
 SQ

Query Match 0.6%; Score 12.4; DB 1; Length 17;  
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1079 CCACTCCAGGCTTC 1092  
 Db |||||  
 15 CCACTCCAGGCTTC 2

RESULT 515  
 ID ABK02631/C standard; RNA; 17 BP.  
 AC ABK02631;  
 XX  
 XX 12-MAR-2002 (first entry)  
 XX Human NOGO Amberzyme #303.  
 DE  
 XX Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;  
 KW cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;  
 KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;  
 KW DNazyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;  
 KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;  
 KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;  
 KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;  
 KW inflammatory arthropathy; central nervous system injury;  
 KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;  
 KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;  
 KW Parkinson's disease; ataxia; Huntington's disease;  
 KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.  
 XX  
 OS Homo sapiens.  
 OS Synthetic.  
 XX  
 PN WC200159103-A2.  
 XX  
 XX 16-AUG-2001.  
 XX  
 XX 09-FEB-2001; 2001WO-US004273.  
 XX  
 PR 11-FEB-2000; 2000US-0181797P.  
 PR 28-FEB-2000; 2000US-0185516P.  
 PR 06-MAR-2000; 2000US-0187128P.  
 XX  
 XX (RIBO-) RIBOZYME PHARM INC.  
 PA (BLAT/) BLATT L.  
 PA (MCSW/) MCSWIGGEN J.  
 PA (CHOW/) CHOWRIRA B M.  
 XX  
 XX Blatt L, Mcswiggen J, Chowrira BM;  
 XX WPI; 2001-607195/69.  
 XX  
 PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense  
 PT constructs, which down regulate expression of a CD20 gene or neurite

PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and  
 PT central nervous system injury.  
 XX Claim 88; Page 137; 200pp; English.  
 XX  
 CC The invention relates to a nucleic acid molecule which down regulates  
 CC expression of a CD20 gene and a nucleic acid molecule which down  
 CC regulates expression of a neurite growth inhibitor gene (NOGO). The  
 CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a  
 CC DNazyme) an inozyme (an endolytic nucleic acid cleaving an RNA molecule  
 CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or  
 CC an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA  
 CC with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA  
 CC of CD20 in the presence of a divalent cation that is preferably  $Mg^{2+}$ .  
 CC Furthermore, it may be contacted with a cell to reduce CD20 activity of  
 CC the cell and treat a patient having a condition associated with the level  
 CC of CD20. The treatment may further comprise the use of one or more  
 CC therapies. In particular, the CD20 targeting nucleic acid may be used to  
 CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-  
 CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic  
 CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell  
 CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,  
 CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-  
 CC targeting nucleic acid is used to cleave RNA of the NOGO gene in the  
 CC presence of a divalent cation that is preferably  $Mg^{2+}$ . Furthermore, the  
 CC nucleic acid may be contacted with a cell to reduce NOGO activity of the  
 CC cell and treat a patient having a condition associated with the level of  
 CC NOGO. The treatment may further comprise the use of one or more  
 CC therapies. In particular, the NOGO-targeting nucleic acid may be used to  
 CC treat central nervous system (CNS) injury and cerebrovascular accident  
 CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),  
 CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),  
 CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob  
 CC disease, muscular dystrophy, and/or other neurodegenerative disease  
 CC states which respond to the modulation of NOGO expression. The present  
 CC sequence is an amberzyme molecule of the invention  
 CC  
 CC Sequence 17 BP; 4 A; 1 C; 8 G; 0 T; 4 U; 0 Other;  
 SQ

Query Match 0.6%; Score 12.4; DB 1; Length 17;  
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1079 CCACTCCAGGCTTC 1092  
 Db |||||  
 14 CCACTCCAGGCTTC 1

RESULT 516  
 ID ABK00750 standard; RNA; 17 BP.  
 XX  
 XX ABK00750;  
 XX  
 XX 12-MAR-2002 (first entry)  
 XX Human NOGO Inozyme #20.  
 XX  
 KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;  
 KW cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;  
 KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;  
 KW DNazyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;  
 KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;  
 KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;  
 KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;  
 KW inflammatory arthropathy; central nervous system injury;  
 KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;  
 KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;  
 KW Parkinson's disease; ataxia; Huntington's disease;  
 KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.  
 XX  
 OS Homo sapiens.  
 OS Synthetic.



```
XX PN WO200159103-A2.
XX PD 16-AUG-2001.
XX PF 09-FEB-2001; 2001WO-US004273.
XX PR 11-FEB-2000; 2000US-0181797P.
XX PR 28-FEB-2000; 2000US-0185516P.
XX PR 06-MAR-2000; 2000US-0187128P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PA (BLAT/) BLATT L.
XX PA (MCSW/) MCSWIGGEN J.
XX PA (CHOW/) CHOWRIRA B M.
XX PI Blatt L, Mcswiggen J, Chowrira BM;
XX WPI; 2001-607195/69.
XX PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
XX PT constructs, which down regulate expression of a CD20 gene or neurite
XX PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
XX PT central nervous system injury.
XX PS Claim 88; Page 78; 200pp; English.
XX CC The invention relates to a nucleic acid molecule which down regulates
XX CC expression of a CD20 gene and a nucleic acid molecule which down
XX CC regulates expression of a neurite growth inhibitor gene (NOGO). The
XX CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
XX CC DNzyme) an inozyme (an endolytic nucleic acid cleaving an RNA molecule
XX CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or
XX CC an amberzyme (cleaving RNA with an NGN triplet), a zynzyme (cleaving RNA
XX CC with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA
XX CC of CD20 in the presence of a divalent cation that is preferably Mg2+.
XX CC Furthermore, it may be contacted with a cell to reduce CD20 activity of
XX CC the cell and treat a patient having a condition associated with the level
XX CC of CD20. The treatment may further comprise the use of one or more
XX CC therapies. In particular, the CD20 targeting nucleic acid may be used to
XX CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
XX CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
XX CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
XX CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
XX CC immune thrombocytopenia, and inflammatory arthropathy. The NOGO-
XX CC targeting nucleic acid is used to cleave RNA of the NOGO gene in the
XX CC presence of a divalent cation that is preferably Mg2+. Furthermore, the
XX CC nucleic acid may be contacted with a cell to reduce NOGO activity of the
XX CC cell and treat a patient having a condition associated with the level of
XX CC NOGO. The treatment may further comprise the use of one or more
XX CC therapies. In particular, the NOGO-targeting nucleic acid may be used to
XX CC treat central nervous system (CNS) injury and cerebrovascular accident
XX CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
XX CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
XX CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
XX CC disease, muscular dystrophy, and/or other neurodegenerative disease
XX CC states which respond to the modulation of NOGO expression. The present
XX CC sequence is an inozyme of the invention.
XX SQ Sequence 17 BP; 3 A; 12 C; 0 G; 0 T; 2 U; 0 Other;
Query Match 0.6%; Score 12.4; DB 1; Length 17;
Best Local Similarity 85.7%; Pred. No. 5.3e+02;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
QY 1254 CATCCCAACCC 1267
Db 2 CCUCCCAACCC 15
RESULT 517
ABK01399/c
ID ABK01399 standard; RNA; 17 BP.
```



CC treat central nervous system (CNS) injury and cerebrovascular accident  
 CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),  
 CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),  
 CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob  
 CC disease, muscular dystrophy, and/or other neurodegenerative disease  
 CC states which respond to the modulation of NOGO expression. The present  
 CC sequence is an inozyme of the invention  
 XX  
 SQ Sequence 17 BP; 6 A; 1 C; 7 G; 0 T; 3 U; 0 Other;  
 Query Match 0.6%; Score 12.4; DB 1; Length 17;  
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1079 CCACCTCCAGGCTTC 1092  
 DB 16 CCACCTCCAGTCTTC 3  
 RESULT 518  
 ABK02089  
 ID ABK02089 standard; RNA; 17 BP.  
 XX  
 AC ABK02089;  
 DT 12-MAR-2002 (first entry)  
 XX  
 DE Human NOGO DNazyme #1.  
 XX  
 KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;  
 KW cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;  
 KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;  
 KW DNazyme; inozyme; G-cleaver; amberyze; zinzyme; lymphoma; leukaemia;  
 KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;  
 KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;  
 KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;  
 KW inflammatory arthropathy; central nervous system injury;  
 KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;  
 KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;  
 KW Parkinson's disease; ataxia; Huntington's disease;  
 KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.  
 XX  
 OS Homo sapiens.  
 OS Synthetic.  
 XX  
 PN WO200159103-A2.  
 XX  
 PD 16-AUG-2001.  
 XX  
 PF 09-FEB-2001; 2001WO-US004273.  
 XX  
 PR 11-FEB-2000; 2000US-0181797P.  
 PR 28-FEB-2000; 2000US-0185516P.  
 PR 06-MAR-2000; 2000US-0187128P.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 PA (BLAT/) BLATT L.  
 PA (MCSW/) MCSWIGGEN J.  
 PA (CHOW/) CHOWIRRA B M.  
 XX  
 XX Blatt L, Mcswiggen J, Chowirra BM;  
 XX WPI; 2001-607195/69.  
 XX  
 XX Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense  
 PT constructs, which down regulate expression of a CD20 gene or neurite  
 PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and  
 PT central nervous system injury.  
 XX  
 XX Claim 88; Page 112; 200pp; English.  
 PS  
 XX The invention relates to a nucleic acid molecule which down regulates  
 CC expression of a CD20 gene and a nucleic acid molecule which down

CC regulates expression of a neurite growth inhibitor gene (NOGO). The  
 CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a  
 CC DNazyme) an inozyme (an endolytic nucleic acid cleaving an RNA molecule  
 CC possessing an NCH motif), a G-cleaver (cleaving RNA with an NIN motif) pr  
 CC an amberyze (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA  
 CC with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA  
 CC of CD20 in the presence of a divalent cation that is preferably Mg<sup>2+</sup>.  
 CC Furthermore, it may be contacted with a cell to reduce CD20 activity of  
 CC the cell and treat a patient having a condition associated with the level  
 CC of CD20. The treatment may further comprise the use of one or more  
 CC therapies. In particular, the CD20 targeting nucleic acid may be used to  
 CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-  
 CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic  
 CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell  
 CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,  
 CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-  
 CC targeting nucleic acid is used to cleave RNA of the NOGO gene in the  
 CC presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, the  
 CC nucleic acid may be contacted with a cell to reduce NOGO activity of the  
 CC cell and treat a patient having a condition associated with the level of  
 CC NOGO. The treatment may further comprise the use of one or more  
 CC therapies. In particular, the NOGO-targeting nucleic acid may be used to  
 CC treat central nervous system (CNS) injury and cerebrovascular accident  
 CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),  
 CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),  
 CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob  
 CC disease, muscular dystrophy, and/or other neurodegenerative disease  
 CC states which respond to the modulation of NOGO expression. The present  
 CC sequence is a DNazyme molecule of the invention  
 XX  
 SQ Sequence 17 BP; 4 A; 12 C; 0 G; 0 T; 1 U; 0 Other;  
 Query Match 0.6%; Score 12.4; DB 1; Length 17;  
 Best Local Similarity 85.7%; Pred. No. 5.3e+02;  
 Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;  
 QY 1254 CATCCCCAACCCCC 1267  
 DB 1 CCUCCCCAACCCCC 14  
 RESULT 519  
 ABK00749  
 ID ABK00749 standard; RNA; 17 BP.  
 XX  
 AC ABK00749;  
 XX  
 DT 12-MAR-2002 (first entry)  
 XX  
 DE Human NOGO Inozyme #19.  
 XX  
 KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;  
 KW cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;  
 KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;  
 KW DNazyme; inozyme; G-cleaver; amberyze; zinzyme; lymphoma; leukaemia;  
 KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;  
 KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;  
 KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;  
 KW inflammatory arthropathy; central nervous system injury;  
 KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;  
 KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;  
 KW Parkinson's disease; ataxia; Huntington's disease;  
 KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.  
 XX  
 OS Homo sapiens.  
 OS Synthetic.  
 XX  
 PN WO200159103-A2.  
 XX  
 PD 16-AUG-2001.  
 XX  
 PF 09-FEB-2001; 2001WO-US004273.  
 XX

PR 11-FEB-2000; 2000US-0181797P.  
PR 28-FEB-2000; 2000US-0185516P.  
PR 06-MAR-2000; 2000US-0187128P.  
XX  
XX (RIBO-) RIBOZYME PHARM INC.  
XX (BLAT/) BLATT L.  
XX (MCSW/) MCSWIGGEN J.  
XX (CHOW/) CHOWRIRA B M.  
XX  
XX Blatt L, Mcswiggen J, Chowrira BM;  
XX WPI; 2001-607195/69.  
XX  
XX Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense  
XX constructs, which down regulate expression of a CD20 gene or neurite  
XX growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and  
XX central nervous system injury.  
XX  
XX Claim 88; Page 78; 200pp; English.  
XX  
XX The invention relates to a nucleic acid molecule which down regulates  
XX expression of a CD20 gene and a nucleic acid molecule which down  
XX regulates expression of a neurite growth inhibitor gene (NOGO). The  
XX nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a  
XX DNzyme) an inozyme (an endolytic nucleic acid cleaving a an RNA molecule  
XX possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or  
XX an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA  
XX with a XGY motif). The CD20-targeting nucleic acid is used to cleave RNA  
XX of CD20 in the presence of a divalent cation that is preferably Mg<sup>2+</sup>.  
XX Furthermore, it may be contacted with a cell to reduce CD20 activity of  
XX the cell and treat a patient having a condition associated with the level  
XX of CD20. The treatment may further comprise the use of one or more  
XX therapies. In particular, the CD20 targeting nucleic acid may be used to  
XX treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-  
XX Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic  
XX leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell  
XX lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,  
XX immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-  
XX targeting nucleic acid is used to cleave RNA of the NOGO gene in the  
XX presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, the  
XX nucleic acid may be contacted with a cell to reduce NOGO activity of the  
XX cell and treat a patient having a condition associated with the level of  
XX NOGO. The treatment may further comprise the use of one or more  
XX therapies. In particular, the NOGO-targeting nucleic acid may be used to  
XX treat central nervous system (CNS) injury and cerebrovascular accident  
XX (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),  
XX chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),  
XX Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob  
XX disease, muscular dystrophy, and/or other neurodegenerative disease  
XX states which respond to the modulation of NOGO expression. The present  
XX sequence is an inozyme of the invention  
XX  
SQ Sequence 17 BP; 3 A; 11 C; 1 G; 2 U; 0 T; 0 Other;  
XX  
Query Match 0.6%; Score 12.4; DB 1; Length 17;  
Best Local Similarity 85.7%; Pred. No. 5.3e+02;  
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;  
XX  
QY 1254 CATCCCCAACCCCC 1267  
Db 3 CCCCCCCCAACCCCC 16  
XX  
RESULT 520  
AAF56034/c  
ID AAF56034 standard; DNA; 17 BP.  
XX  
XX AAF56034;  
XX  
XX 18-APR-2001 (first entry)  
XX  
XX HBV DNA polymerase gene L528M mutation probe HBPr293.  
XX  
XX

KW HBV; hepatitis B virus; DNA polymerase gene; anti-HBV drug resistance;  
KW mutation detection; probe; ss.  
XX  
XX Hepatitis B virus.  
XX  
XX Hepatitis B virus.  
XX  
XX WO200104358-A2.  
XX  
XX 18-JAN-2001.  
XX  
XX 05-JUL-2000; 2000WO-EP006306.  
XX  
XX 08-JUL-1999; 99EP-00870148.  
XX  
XX 13-JUL-1999; 99US-0143546P.  
XX  
XX (INNO-) INNOGENETICS NV.  
XX  
XX Stuyver L, Maertens G, Van Geyt C;  
XX WPI; 2001-138370/14.  
XX  
XX Monitoring anti-HBV drug resistance by generic detection of mutations in  
XX DNA polymerase of HBV in patient's sample, involves hybridizing the  
XX polynucleic acids of the sample with a probe and detecting the hybrid.  
XX  
XX Claim 2; Page 9; 64pp; English.  
XX  
XX The present sequence is a probe used in a method for monitoring anti-  
XX hepatitis B virus (HBV) drug resistance in a patient by genetic detection  
XX of any one of mutations L528M, M552V/I and/or V/L/M551 in HBV DNA  
XX polymerase in a biological sample from the patient. The method is useful  
XX in the field of genetic detection of anti-HBV drug resistance during HBV  
XX therapy. The method is rapid, reliable and precise  
XX  
XX Sequence 17 BP; 1 A; 7 C; 3 G; 6 T; 0 U; 0 Other;  
XX  
Query Match 0.6%; Score 12.4; DB 1; Length 17;  
Best Local Similarity 92.9%; Pred. No. 5.3e+02;  
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
XX  
QY 728 GCCAGGAGAAACAG 741  
Db 14 GCCAGGAGAAACGG 1  
XX  
RESULT 521  
AAH80076  
ID AAH80076 standard; cDNA; 17 BP.  
XX  
XX AAH80076;  
XX  
XX 19-SEP-2001 (first entry)  
XX  
XX Oligonucleotide hybridisation potential related cDNA SEQ ID NO: 40.  
XX  
XX Nucleic acid hybridisation; probe; primer; human; rabbit; HIV-1;  
XX disease diagnosis; ss.  
XX  
XX Oryctolagus cuniculus.  
XX  
XX US6251588-B1.  
XX  
XX 26-JUN-2001.  
XX  
XX 10-FEB-1998; 98US-00021701.  
XX  
XX 10-FEB-1998; 98US-00021701.  
XX  
XX (AGIL-) AGILENT TECHNOLOGIES INC.  
XX  
XX Shannon KW, Wolber PK, Delenstarr GC, Webb PG, Kincaid RH;  
XX WPI; 2001-424456/45.  
XX  
XX

PT Predicting the potential of an oligonucleotide to hybridize to a target  
 PT nucleotide sequence, useful for evaluating oligonucleotide probe  
 PT sequences, by identifying a oligonucleotides based on the evaluation of  
 PT parameters.

XX Example 1; Col 45-46; 342pp; English.

XX The present invention describes a method for predicting the potential of  
 CC an oligonucleotide to hybridize to a (complementary) target nucleotide  
 CC sequence, involving identifying a subset of oligonucleotides within the  
 CC predetermined number of unique oligonucleotides based on the evaluation  
 CC of the parameter. Oligonucleotides in the subset are identified that are  
 CC clustered along a region of the nucleotide sequence that is hybridisable  
 CC to the target nucleotide sequence. This is useful for evaluating  
 CC oligonucleotide probe sequences. The present sequence is an  
 CC oligonucleotide described in the exemplification of the invention

XX Sequence 17 BP; 3 A; 7 C; 0 G; 7 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 17;  
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1125 TTCACCTTCACCT 1138

DB 4 TTCACATTCACCT 17

RESULT 522

AAH80078  
 ID AAH80078 standard; cDNA; 17 BP.

AC AAH80078;

DT 19-SEP-2001 (first entry)

DE Oligonucleotide hybridisation potential related cDNA SEQ ID NO: 42.

KW Nucleic acid hybridisation; probe; primer; human; rabbit; HIV-1;  
 KW disease diagnosis; ss.

OS Oryctolagus cuniculus.

PN US6251588-B1.

PD 26-JUN-2001.

PF 10-FEB-1998; 98US-00021701.

PR 10-FEB-1998; 98US-00021701.

PA (AGIL-) AGILENT TECHNOLOGIES INC.

PI Shannon KW, Wolber PK, Delenstarr GC, Webb PG, Kincaid RH;

XX WPI; 2001-424456/45.

XX Predicting the potential of an oligonucleotide to hybridize to a target  
 PT nucleotide sequence, useful for evaluating oligonucleotide probe  
 PT sequences, by identifying a oligonucleotides based on the evaluation of  
 PT parameters.

XX Example 1; Col 45-46; 342pp; English.

XX The present invention describes a method for predicting the potential of  
 CC an oligonucleotide to hybridize to a (complementary) target nucleotide  
 CC sequence, involving identifying a subset of oligonucleotides within the  
 CC predetermined number of unique oligonucleotides based on the evaluation  
 CC of the parameter. Oligonucleotides in the subset are identified that are  
 CC clustered along a region of the nucleotide sequence that is hybridisable  
 CC to the target nucleotide sequence. This is useful for evaluating  
 CC oligonucleotide probe sequences. The present sequence is an  
 CC oligonucleotide described in the exemplification of the invention

XX SQ Sequence 17 BP; 3 A; 7 C; 1 G; 6 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 12.4; DB 1; Length 17;  
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1125 TTCACCTTCACCT 1138

DB 2 TTCACATTCACCT 15

RESULT 523

AAH80079  
 ID AAH80079 standard; cDNA; 17 BP.

AC AAH80079;

DT 19-SEP-2001 (first entry)

DE Oligonucleotide hybridisation potential related cDNA SEQ ID NO: 43.

KW Nucleic acid hybridisation; probe; primer; human; rabbit; HIV-1;  
 KW disease diagnosis; ss.

OS Oryctolagus cuniculus.

PN US6251588-B1.

PD 26-JUN-2001.

PF 10-FEB-1998; 98US-00021701.

PR 10-FEB-1998; 98US-00021701.

PA (AGIL-) AGILENT TECHNOLOGIES INC.

PI Shannon KW, Wolber PK, Delenstarr GC, Webb PG, Kincaid RH;

XX WPI; 2001-424456/45.

XX Predicting the potential of an oligonucleotide to hybridize to a target  
 PT nucleotide sequence, useful for evaluating oligonucleotide probe  
 PT sequences, by identifying a oligonucleotides based on the evaluation of  
 PT parameters.

XX Example 1; Col 45-46; 342pp; English.

XX The present invention describes a method for predicting the potential of  
 CC an oligonucleotide to hybridize to a (complementary) target nucleotide  
 CC sequence, involving identifying a subset of oligonucleotides within the  
 CC predetermined number of unique oligonucleotides based on the evaluation  
 CC of the parameter. Oligonucleotides in the subset are identified that are  
 CC clustered along a region of the nucleotide sequence that is hybridisable  
 CC to the target nucleotide sequence. This is useful for evaluating  
 CC oligonucleotide probe sequences. The present sequence is an  
 CC oligonucleotide described in the exemplification of the invention

XX SQ Sequence 17 BP; 3 A; 7 C; 1 G; 6 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 17;  
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1125 TTCACCTTCACCT 1138

DB 1 TTCACATTCACCT 14

RESULT 524

AAH80077  
 ID AAH80077 standard; cDNA; 17 BP.

XX

AC AAH80077;  
 XX 19-SEP-2001 (first entry)  
 XX Oligonucleotide hybridisation potential related cDNA SEQ ID NO: 41.  
 DE Nucleic acid hybridisation; probe; primer; human; rabbit; HIV-1;  
 XX disease diagnosis; ss.  
 KW Oryctolagus cuniculus.  
 XX OS  
 XX US6251588-B1.  
 PN 26-JUN-2001.  
 XX 10-FEB-1998; 98US-00021701.  
 XX 10-FEB-1998; 98US-00021701.  
 XX (AGIL-) AGILENT TECHNOLOGIES INC.  
 XX Shannon KW, Wolber PK, Delenstarr GC, Webb PG, Kincaid RH;  
 PI WPI; 2001-424456/45.  
 XX Predicting the potential of an oligonucleotide to hybridize to a target  
 PT nucleotide sequence, useful for evaluating oligonucleotide probe  
 PT sequences, by identifying a oligonucleotides based on the evaluation of  
 PT parameters.  
 XX Example 1; Col 45-46; 342pp; English.  
 XX The present invention describes a method for predicting the potential of  
 CC an oligonucleotide to hybridize to a (complementary) target nucleotide  
 CC sequence, involving identifying a subset of oligonucleotides within the  
 CC predetermined number of unique oligonucleotides based on the evaluation  
 CC of the parameter. Oligonucleotides in the subset are identified that are  
 CC clustered along a region of the nucleotide sequence that is hybridisable  
 CC to the target nucleotide sequence. This is useful for evaluating  
 CC oligonucleotide probe sequences. The present sequence is an  
 CC oligonucleotide described in the exemplification of the invention  
 XX Sequence 17 BP; 3 A; 7 C; 0 G; 7 T; 0 U; 0 Other;  
 SQ Query Match 0.6%; Score 12.4; DB 1; Length 17;  
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1125 TTCACCTTCACCT 1138  
 DB 3 TTCACATTCACCT 16  
 RESULT 525  
 ABN08365/C  
 ID ABN08365 standard; DNA; 17 BP.  
 XX AC  
 XX ABN08365;  
 XX 29-MAY-2002 (first entry)  
 XX Human GDMPLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:8357.  
 DE Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;  
 KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;  
 KW skeletal muscle disorder; amplicon; screening; ss.  
 XX OS Homo sapiens.  
 XX WO200192524-A2.  
 XX 06-DEC-2001.  
 PD 06-DEC-2001.  
 XX

PF 25-MAY-2001; 2001WO-US016981.  
 XX 26-MAY-2000; 2000US-0207456P.  
 PR 21-SEP-2000; 2000US-0234687P.  
 PR 27-SEP-2000; 2000US-0236359P.  
 PR 04-OCT-2000; 2000GB-00024263.  
 PR 30-JAN-2001; 2001WO-US000661.  
 PR 30-JAN-2001; 2001WO-US000662.  
 PR 30-JAN-2001; 2001WO-US000663.  
 PR 30-JAN-2001; 2001WO-US000664.  
 PR 30-JAN-2001; 2001WO-US000665.  
 PR 30-JAN-2001; 2001WO-US000666.  
 PR 30-JAN-2001; 2001WO-US000667.  
 PR 30-JAN-2001; 2001WO-US000668.  
 PR 30-JAN-2001; 2001WO-US000669.  
 PR 30-JAN-2001; 2001WO-US000670.  
 PR 05-FEB-2001; 2001US-0266860P.  
 XX (AEOM-) AEOMICA INC.  
 XX Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;  
 PI WPI; 2002-179446/23.  
 XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,  
 PT or as specific biomolecule capture probes for surface-enhanced laser  
 PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.  
 XX Disclosure; SEQ ID NO 8357; 214pp; English.  
 XX The present invention describes a human genome-derived myosin-like  
 CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-  
 CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1  
 CC nucleic acids can be used as probes to detect, characterise and quantify  
 CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to  
 CC provide initial substrates for the recombinant engineering of hGDMPLP-1  
 CC protein variants having desired phenotypic improvements, and for  
 CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be  
 CC used as immunogens to raise antibodies that specifically recognise hGDMPLP  
 CC -1 proteins, as standards in assays used to determine the concentration  
 CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule  
 CC capture probes for surface-enhanced laser desorption ionisation, as  
 CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1  
 CC production, and in vaccines or for replacement therapy. The  
 CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a  
 CC disorder associated with the expression of hGDMPLP-1, in particular heart  
 CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.  
 CC The present sequence represents an oligomer used in the screening of the  
 CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.  
 CC The sequence data for this patent did not form part of the printed  
 CC specification, but was obtained in electronic format directly from WIPO  
 CC at ftp.wipo.int/pub/published\_pct\_sequence  
 XX Sequence 17 BP; 7 A; 1 C; 8 G; 1 T; 0 U; 0 Other;  
 SQ Query Match 0.6%; Score 12.4; DB 1; Length 17;  
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1137 CTCACGCTCCACCT 1150  
 DB 15 CTCACGCTCTCTCT 2  
 RESULT 526  
 ABN08366/C  
 ID ABN08366 standard; DNA; 17 BP.  
 XX AC  
 XX ABN08366;  
 XX 29-MAY-2002 (first entry)  
 XX Human GDMPLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:8358.  
 DE

XX Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;  
 KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;  
 KW skeletal muscle disorder; amplicon; screening; ss.  
 XX Homo sapiens.  
 XX WO200192524-A2.  
 XX 06-DEC-2001.  
 XX 25-MAY-2001; 2001WO-US016981.  
 XX 26-MAY-2000; 2000US-0207456P.  
 XX 21-SEP-2000; 2000US-0234687P.  
 XX 27-SEP-2000; 2000US-0236359P.  
 XX 04-OCT-2000; 2000GB-00024263.  
 XX 30-JAN-2001; 2001WO-US000661.  
 XX 30-JAN-2001; 2001WO-US000662.  
 XX 30-JAN-2001; 2001WO-US000663.  
 XX 30-JAN-2001; 2001WO-US000664.  
 XX 30-JAN-2001; 2001WO-US000665.  
 XX 30-JAN-2001; 2001WO-US000666.  
 XX 30-JAN-2001; 2001WO-US000667.  
 XX 30-JAN-2001; 2001WO-US000668.  
 XX 30-JAN-2001; 2001WO-US000669.  
 XX 30-JAN-2001; 2001WO-US000670.  
 XX 05-FEB-2001; 2001US-0266860P.  
 XX (AEOM-) AEOMICA INC.  
 XX Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;  
 XX WPI; 2002-179446/23.  
 XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,  
 PT or as specific biomolecule capture probes for surface-enhanced laser  
 PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.  
 XX Disclosure; SEQ ID NO 8358; 214pp; English.  
 XX The present invention describes a human genome-derived myosin-like  
 CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-  
 CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1  
 CC nucleic acids can be used as probes to detect, characterize and quantify  
 CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to  
 CC provide initial substrates for the recombinant engineering of hGDMPLP-1  
 CC protein variants having desired phenotypic improvements, and for  
 CC production, and in vaccines or for replacement therapy. The  
 CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a  
 CC disorder associated with the expression of hGDMPLP-1 in particular heart  
 CC skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.  
 CC The present sequence represents an oligomer used in the screening of the  
 CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.  
 CC The sequence data for this patent did not form part of the printed  
 CC specification, but was obtained in electronic format directly from WIPO  
 CC at ftp.wipo.int/pub/published\_pct\_sequence  
 XX Sequence 17 BP; 7 A; 1 C; 8 G; 1 T; 0 U; 0 Other;  
 SQ Query Match 0.6%; Score 12.4; DB 1; Length 17;  
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1137 CTCACGTCACCT 1150  
 |||||  
 DB 14 CTCACGTCCTCT 1

RESULT 527  
 ABN08363/c  
 ID ABN08363 standard; DNA; 17 BP.  
 XX  
 XX AC ABN08363;  
 XX  
 XX DT 29-MAY-2002 (first entry)  
 XX  
 XX DE Human GDMPLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:8355.  
 XX  
 XX KW Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;  
 KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;  
 KW skeletal muscle disorder; amplicon; screening; ss.  
 XX  
 XX OS Homo sapiens.  
 XX  
 XX PN WO200192524-A2.  
 XX  
 XX PD 06-DEC-2001.  
 XX  
 XX PF 25-MAY-2001; 2001WO-US016981.  
 XX  
 XX PR 26-MAY-2000; 2000US-0207456P.  
 XX  
 XX PR 21-SEP-2000; 2000US-0234687P.  
 XX  
 XX PR 27-SEP-2000; 2000US-0236359P.  
 XX  
 XX PR 04-OCT-2000; 2000GB-00024263.  
 XX  
 XX PR 30-JAN-2001; 2001WO-US000661.  
 XX  
 XX PR 30-JAN-2001; 2001WO-US000662.  
 XX  
 XX PR 30-JAN-2001; 2001WO-US000663.  
 XX  
 XX PR 30-JAN-2001; 2001WO-US000664.  
 XX  
 XX PR 30-JAN-2001; 2001WO-US000665.  
 XX  
 XX PR 30-JAN-2001; 2001WO-US000666.  
 XX  
 XX PR 30-JAN-2001; 2001WO-US000667.  
 XX  
 XX PR 30-JAN-2001; 2001WO-US000668.  
 XX  
 XX PR 30-JAN-2001; 2001WO-US000669.  
 XX  
 XX PR 30-JAN-2001; 2001WO-US000670.  
 XX  
 XX PR 05-FEB-2001; 2001US-0266860P.  
 XX  
 XX PA (AEOM-) AEOMICA INC.  
 XX  
 XX PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;  
 XX  
 XX WPI; 2002-179446/23.  
 XX  
 XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,  
 PT or as specific biomolecule capture probes for surface-enhanced laser  
 PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.  
 XX Disclosure; SEQ ID NO 8358; 214pp; English.  
 XX The present invention describes a human genome-derived myosin-like  
 CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-  
 CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1  
 CC nucleic acids can be used as probes to detect, characterize and quantify  
 CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to  
 CC provide initial substrates for the recombinant engineering of hGDMPLP-1  
 CC protein variants having desired phenotypic improvements, and for  
 CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be  
 CC used as immunogens to raise antibodies that specifically recognise hGDMPLP  
 CC -1 proteins, as standards in assays used to determine the concentration  
 CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule  
 CC capture probes for surface-enhanced laser desorption ionisation, as  
 CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1  
 CC production, and in vaccines or for replacement therapy. The  
 CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a  
 CC disorder associated with the expression of hGDMPLP-1 in particular heart  
 CC skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.  
 CC The present sequence represents an oligomer used in the screening of the  
 CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.  
 CC The sequence data for this patent did not form part of the printed  
 CC specification, but was obtained in electronic format directly from WIPO  
 CC at ftp.wipo.int/pub/published\_pct\_sequence  
 XX Sequence 17 BP; 7 A; 1 C; 8 G; 1 T; 0 U; 0 Other;  
 SQ Query Match 0.6%; Score 12.4; DB 1; Length 17;  
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1137 CTCACGTCACCT 1150  
 |||||  
 DB 14 CTCACGTCCTCT 1

```
CC at ftp.wipo.int/pub/published_pct_sequence
XX
SQ Sequence 17 BP; 5 A; 2 C; 9 G; 1 T; 0 U; 0 Other;

Query Match      0.6%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 5.3e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1137 CTCGAGCTCCACCT 1150
Db 17 CTCGAGCTCCTCT 4

RESULT 528
ABN08364/C
ID ABN08364 standard; DNA; 17 BP.
XX
AC ABN08364;
XX
XX 29-MAY-2002 (first entry)
XX
DE Human GDMPLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:8356.
XX
XX Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW skeletal muscle disorder; amplicon; screening; ss.
XX
OS Homo sapiens.
XX
XX WO200192524-A2.
XX
PD 06-DEC-2001.
XX
XX 25-MAY-2001; 2001WO-US016981.
XX
PR 26-MAY-2000; 2000US-0207456P.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
PR 30-JAN-2001; 2001WO-US000661.
PR 30-JAN-2001; 2001WO-US000662.
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 05-FEB-2001; 2001US-0266860P.
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XX (AEOM-) ABOMICA INC.
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PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
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XX WPI; 2002-179446/23.
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XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
XX or as specific biomolecule capture probes for surface-enhanced laser
XX desorption ionization, comprises human myosin-like protein hGDMPLP-1.
XX
XX Disclosure; SEQ ID NO 8356; 214pp; English.
XX
XX The present invention describes a human genome-derived myosin-like
XX protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
XX 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
XX nucleic acids can be used as probes to detect, characterise and quantify
XX hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
XX provide initial substrates for the recombinant engineering of hGDMPLP-1
XX protein variants having desired phenotypic improvements, and for
XX expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
XX used as immunogens to raise antibodies that specifically recognise hGDMPLP
XX -1 proteins, as standards in assays used to determine the concentration
```

```
CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule
CC capture probes for surface-enhanced laser desorption ionisation, as
CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1
CC production, and in vaccines or for replacement therapy. The
CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
CC disorder associated with the expression of hGDMPLP-1, in particular heart
CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
CC The present sequence represents an oligomer used in the screening of the
CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence
XX
SQ Sequence 17 BP; 6 A; 2 C; 8 G; 1 T; 0 U; 0 Other;

Query Match      0.6%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 5.3e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1137 CTCGAGCTCCACCT 1150
Db 16 CTCGAGCTCCTCT 3

RESULT 529
ABN00983
ID ABN00983 standard; DNA; 17 BP.
XX
AC ABN00983;
XX
XX 29-MAY-2002 (first entry)
XX
DE Human GDMPLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:975.
XX
XX Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW skeletal muscle disorder; amplicon; screening; ss.
XX
OS Homo sapiens.
XX
XX WO200192524-A2.
XX
PD 06-DEC-2001.
XX
XX 25-MAY-2001; 2001WO-US016981.
XX
PR 26-MAY-2000; 2000US-0207456P.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
PR 30-JAN-2001; 2001WO-US000661.
PR 30-JAN-2001; 2001WO-US000662.
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 05-FEB-2001; 2001US-0266860P.
XX
XX (AEOM-) ABOMICA INC.
XX
PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX
XX WPI; 2002-179446/23.
XX
XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
XX or as specific biomolecule capture probes for surface-enhanced laser
XX desorption ionization, comprises human myosin-like protein hGDMPLP-1.
XX
XX Disclosure; SEQ ID NO 975; 214pp; English.
```

XX The present invention describes a human genome-derived myosin-like  
 CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-  
 CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1  
 CC nucleic acids can be used as probes to detect, characterise and quantify  
 CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to  
 CC provide initial substrates for the recombinant engineering of hGDMPLP-1  
 CC protein variants having desired phenotypic improvements, and for  
 CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be  
 CC used as immunogens to raise antibodies that specifically recognise hGDMPLP  
 CC -1 proteins, as standards in assays used to determine the concentration  
 CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule  
 CC capture probes for surface-enhanced laser desorption/ionisation, as  
 CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1  
 CC production, and in vaccines or for replacement therapy. The  
 CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a  
 CC disorder associated with the expression of hGDMPLP-1, in particular heart  
 CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.  
 CC The present sequence represents an oligomer used in the screening of the  
 CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.  
 CC The sequence data for this patent did not form part of the printed  
 CC specification, but was obtained in electronic format directly from WIPO  
 CC at ftp.wipo.int/pub/published\_pct\_sequence  
 XX  
 XX Sequence 17 BP; 4 A; 8 C; 5 G; 0 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 17;  
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1057 GCCCCAAACCCCAAG 1070  
 Db 1 GCCCCAAACCCCAAG 14

RESULT 530  
 ABV80011/c  
 ID ABV80011 standard; DNA; 17 BP.

XX AC ABV80011;

XX XX 03-JAN-2003 (first entry)

XX Human HTPL scanning oligonucleotide SEQ ID 1257.

XX Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;  
 KW human testis expressed Patched like protein; testis; adrenal; liver;  
 KW male germ cell development; bone marrow; brain; kidney; lung; placenta;  
 KW prostate; skeletal muscle; colon; male infertility; cancer; ss.

XX OS Homo sapiens.

XX PN EP1229046-A2.

XX XX 07-AUG-2002.

XX XX 28-JAN-2002; 2002EP-00001167.

XX XX 30-JAN-2001; 2001WO-US000663.

XX PR 30-JAN-2001; 2001WO-US000664.

XX PR 30-JAN-2001; 2001WO-US000665.

XX PR 30-JAN-2001; 2001WO-US000667.

XX PR 30-JAN-2001; 2001WO-US000668.

XX PR 30-JAN-2001; 2001WO-US000669.

XX PR 23-MAY-2001; 2001US-00864761.

XX PR 09-OCT-2001; 2001US-0327898P.

XX PA (ABOM-) AEOMICA INC.

XX PI Zhan J;

XX XX WPI; 2002-676582/73.

XX PT

XX XX

PT Novel isolated human testis expressed Patched like protein (HTPL), useful  
 PT for identifying agonist and antagonist and specific binding partners, and  
 PT for treating subjects having defects in HTPL.

XX Example 2; Page 228; 718pp; English.

XX The present invention relates to human testis expressed Patched like  
 CC protein (HTPL, see ABV78759 to ABV78762 and ABV8519 to ABV8520). HTPL  
 CC has two isoforms, with a few single base pair differences between the  
 CC two. One of the single base pair changes introduces a premature stop  
 CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL  
 CC shares an overall structure organisation with the Patched protein. The  
 CC shared structural features strongly imply that HTPL plays a role similar  
 CC to that of Patched, and is a potential tumour suppressor. HTPL is  
 CC important in regulating male germ cell development, and the HTPL gene was  
 CC mapped to human chromosome 10p12.1. HTPL and its coding sequence are  
 CC useful for diagnosing a disorder caused by mutation in HTPL, and in  
 CC therapy and manufacture of a medicament for treatment or prevention of  
 CC such disorder associated with decreased expression or activity of human  
 CC HTPL. Such disorders include disorders of testis, or adrenal, adult and  
 CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,  
 CC skeletal muscle or colon function. HTPL proteins and nucleic acids are  
 CC clinically useful diagnostic markers and potential therapeutic agents for  
 CC male infertility and cancer. The present oligonucleotide was used in an  
 CC example from the invention

XX Sequence 17 BP; 3 A; 5 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 17;  
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 727 TGCAGGAGAAACA 740  
 Db 14 TGCAGGTGAACA 1

RESULT 531

ABV83098/c

ID ABV83098 standard; DNA; 17 BP.

XX AC ABV83098;

XX XX 03-JAN-2003 (first entry)

XX Human HTPL scanning oligonucleotide SEQ ID 4344.

XX Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;  
 KW human testis expressed Patched like protein; testis; adrenal; liver;  
 KW male germ cell development; bone marrow; brain; kidney; lung; placenta;  
 KW prostate; skeletal muscle; colon; male infertility; cancer; ss.

XX OS Homo sapiens.

XX PN EP1229046-A2.

XX XX 07-AUG-2002.

XX XX 28-JAN-2002; 2002EP-00001167.

XX XX 30-JAN-2001; 2001WO-US000663.

XX PR 30-JAN-2001; 2001WO-US000664.

XX PR 30-JAN-2001; 2001WO-US000665.

XX PR 30-JAN-2001; 2001WO-US000667.

XX PR 30-JAN-2001; 2001WO-US000668.

XX PR 30-JAN-2001; 2001WO-US000669.

XX PR 23-MAY-2001; 2001US-00864761.

XX PR 09-OCT-2001; 2001US-0327898P.

XX PA (ABOM-) AEOMICA INC.

XX PI Zhan J;

XX XX

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DR WPI; 2002-676582/73.
XX
PT Novel isolated human testis expressed Patched like protein (HTPL), useful
PT for identifying agonist and antagonist and specific binding partners, and
PT for treating subjects having defects in HTPL.
XX
PS Example 2; Page 633; 718pp; English.
XX
CC The present invention relates to human testis expressed Patched like
CC protein (HTPL, see ABV78759 to ABV78762 and AB98519 to AB98520). HTPL
CC has two isoforms, with a few single base pair differences between the
CC two. One of the single base pair changes introduces a premature stop
CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL
CC shares an overall structure organisation with the Patched protein. The
CC shared structural features strongly imply that HTPL plays a role similar
CC to that of Patched, and is a potential tumour suppressor. HTPL is
CC important in regulating male germ cell development, and the HTPL gene was
CC useful for diagnosing a disorder caused by mutation in HTPL, and in
CC therapy and manufacture of a medicament for treatment or prevention of
CC such disorder associated with decreased expression or activity of human
CC HTPL. Such disorders include disorders of testis, or adrenal, adult and
CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
CC skeletal muscle or colon function. HTPL proteins and nucleic acids are
CC clinically useful diagnostic markers and potential therapeutic agents for
CC male infertility and cancer. The present oligonucleotide was used in an
CC example from the invention
XX
SQ Sequence 17 BP; 8 A; 4 C; 2 G; 3 T; 0 U; 0 Other;
Query Match 0.6%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 5.3e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 914 TTGGTCCTTGGCTT 927
Db 14 TTGGTCCTTGGACTT 1
RESULT 532
ABV83097/c
ID ABV83097 standard; DNA; 17 BP.
AC ABV83097;
XX
XX 03-JAN-2003 (first entry)
XX
DE Human HTPL scanning oligonucleotide SEQ ID 4343.
XX
KW Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;
KW human testis expressed Patched like protein; testis; adrenal; liver;
KW male germ cell development; bone marrow; brain; kidney; lung; placenta;
KW prostate; skeletal muscle; colon; male infertility; cancer; ss.
XX
OS Homo sapiens.
XX
PN EP1229046-A2.
XX
PD 07-AUG-2002.
XX
XX 28-JAN-2002; 2002EP-00001167.
XX
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 23-MAY-2001; 2001US-00864761.
PR 09-OCT-2001; 2001US-0327898P.
XX
PA (AEOM-) AEONICA INC.
XX
PI Zhan J;
XX
DR WPI; 2002-676582/73.
XX
PT Novel isolated human testis expressed Patched like protein (HTPL), useful
PT for identifying agonist and antagonist and specific binding partners, and
PT for treating subjects having defects in HTPL.
XX
PS Example 2; Page 633; 718pp; English.
XX
CC The present invention relates to human testis expressed Patched like
CC protein (HTPL, see ABV78759 to ABV78762 and AB98519 to AB98520). HTPL
CC has two isoforms, with a few single base pair differences between the
CC two. One of the single base pair changes introduces a premature stop
CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL
CC shares an overall structure organisation with the Patched protein. The
CC shared structural features strongly imply that HTPL plays a role similar
CC to that of Patched, and is a potential tumour suppressor. HTPL is
CC important in regulating male germ cell development, and the HTPL gene was
CC useful for diagnosing a disorder caused by mutation in HTPL, and in
CC therapy and manufacture of a medicament for treatment or prevention of
CC such disorder associated with decreased expression or activity of human
CC HTPL. Such disorders include disorders of testis, or adrenal, adult and
CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
CC skeletal muscle or colon function. HTPL proteins and nucleic acids are
CC clinically useful diagnostic markers and potential therapeutic agents for
CC male infertility and cancer. The present oligonucleotide was used in an
CC example from the invention
XX
SQ Sequence 17 BP; 8 A; 4 C; 2 G; 3 T; 0 U; 0 Other;
Query Match 0.6%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 5.3e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 914 TTGGTCCTTGGCTT 927
Db 15 TTGGTCCTTGGACTT 2
RESULT 533
ABV80010/c
ID ABV80010 standard; DNA; 17 BP.
AC ABV80010;
XX
XX 03-JAN-2003 (first entry)
XX
DE Human HTPL scanning oligonucleotide SEQ ID 1256.
XX
KW Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;
KW human testis expressed Patched like protein; testis; adrenal; liver;
KW male germ cell development; bone marrow; brain; kidney; lung; placenta;
KW prostate; skeletal muscle; colon; male infertility; cancer; ss.
XX
OS Homo sapiens.
XX
PN EP1229046-A2.
XX
PD 07-AUG-2002.
XX
XX 28-JAN-2002; 2002EP-00001167.
XX
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 23-MAY-2001; 2001US-00864761.
PR 09-OCT-2001; 2001US-0327898P.
XX
PA (AEOM-) AEONICA INC.
XX
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PA (AEOM-) AEOMICA INC.
XX
PI Zhan J;
XX
DR WPI; 2002-676582/73.
XX
PT Novel isolated human testis expressed patched like protein (HTPL), useful
PT for identifying agonist and antagonist and specific binding partners, and
PT for treating subjects having defects in HTPL.
XX
PS Example 2; Page 228; 718pp; English.
XX
XX The present invention relates to human testis expressed patched like
CC protein (HTPL, see ABV78759 to ABV78762 and ABB98519 to ABB98520). HTPL
CC has two isoforms, with a few single base pair differences between the
CC two. One of the single base pair changes introduces a premature stop
CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL
CC shares an overall structure organisation with the Patched protein. The
CC shared structural features strongly imply that HTPL plays a role similar
CC to that of Patched, and is a potential tumour suppressor. HTPL is
CC important in regulating male germ cell development, and the HTPL gene was
CC mapped to human chromosome 10p12.1. HTPL and its coding sequence are
CC useful for diagnosing a disorder caused by mutation in HTPL, and in
CC therapy and manufacture of a medicament for treatment or prevention of
CC such disorder associated with decreased expression or activity of human
CC HTPL. Such disorders include disorders of testis, or adrenal, adult and
CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate, and
CC skeletal muscle or colon function. HTPL proteins and nucleic acids are
CC clinically useful diagnostic markers and potential therapeutic agents for
CC male infertility and cancer. The present oligonucleotide was used in an
CC example from the invention
XX
SQ Sequence 17 BP; 3 A; 4 C; 4 G; 6 T; 0 U; 0 Other;
Query Match 0.6%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 5.3e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 727 TGCCAGGGAACA 740
DB 15 TGCCAGGTGAACA 2
RESULT 534
ABK18188
XX ID ABK18188 standard; RNA; 17 BP.
XX AC ABK18188;
XX DT 09-APR-2002 (first entry)
XX DE Human ERG hammerhead ribozyme target sequence, Seq ID No 835.
XX KW Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
XX KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;
XX KW vulnary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
XX KW tumour angiogenesis; diabetic retinopathy; macular degeneration;
XX KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
XX KW angiofibroma of tuberous sclerosis; port-wine stain; wound healing;
XX KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;
XX KW Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme;
XX KW amberzyme.
XX OS Homo sapiens.
XX FN WO200188124-A2.
XX XX 22-NOV-2001.
XX PF 16-MAY-2001; 2001WO-US015866.
XX PR 16-MAY-2000; 2000US-00572021.
XX

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PA (RIBO-) RIBOZYME PHARM INC.
XX (GLAX ) GLAXO GROUP LTD.
PI Jarvis T, Von Carlowitz I, Meswiggen JA, McLaughlin F, Randi AM;
XX WPI; 2002-082995/11.
DR
XX Novel polynucleotide which down regulates expression of Ets-related gene,
PT useful for treating cancer, diabetic retinopathy, macular degeneration,
PT arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
XX
PS Claim 4; Page 74; 149pp; English.
XX
XX The invention relates to a nucleic acid molecule (I) which down regulates
CC expression of an Ets-related gene (ERG). (I) is useful for treating
CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
CC tumour angiogenesis, diabetic retinopathy, macular degeneration,
CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca
CC vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge
CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu
CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for
CC treating a patient having a condition associated with the level of ERG,
CC by contacting cells of the patient with (I) under conditions suitable for
CC the treatment. The method comprises the use of one or more therapies
CC under conditions suitable for the treatment. Leukaemia or tumour
CC conjunction with one or more of other therapies such as radiation or
CC chemotherapy treatment. (I) is useful for reducing ERG activity in a
CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
CC ERG gene, by contacting (I) with RNA, in the presence of a divalent
CC cation such as Mg2+. (I) is useful for diagnosis of conditions and
CC diseases related to the expression of ERG, and as diagnostic tool to
CC examine genetic drift and mutations within diseased cells or to detect
CC the presence of ERG RNA in a cell. (I) is useful for specifically
CC targeting genes that share homology with ERG gene or ERG fusion genes.
CC ABK17354-ABK22719 represent nucleic acids, including antisense and
CC enzymatic nucleic acid molecules which regulate expression of ERG, and
CC related PCR primers of the invention
XX
SQ Sequence 17 BP; 2 A; 11 C; 3 G; 0 T; 1 U; 0 Other;
Query Match 0.6%; Score 12.4; DB 1; Length 17;
Best Local Similarity 85.7%; Pred. No. 5.3e+02;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
QY 1136 CCTCCAGCTCCACC 1149
DB 4 CCUCCAGCCCCACC 17
RESULT 535
ABK18189
XX ID ABK18189 standard; RNA; 17 BP.
XX AC ABK18189;
XX DT 09-APR-2002 (first entry)
XX DE Human ERG hammerhead ribozyme target sequence, Seq ID No 836.
XX KW Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
XX KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;
XX KW vulnary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
XX KW tumour angiogenesis; diabetic retinopathy; macular degeneration;
XX KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
XX KW angiofibroma of tuberous sclerosis; port-wine stain; wound healing;
XX KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;
XX KW Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme;
XX KW amberzyme.
XX OS Homo sapiens.
XX FN WO200188124-A2.
XX PN

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XX PD 22-NOV-2001.  
 XX PF 16-MAY-2001; 2001WO-US015866.  
 XX PR 16-MAY-2000; 2000US-00572021.  
 XX PA (RIBO-) RIBOZYME PHARM INC.  
 XX PA (GLAX) GLAXO GROUP LTD.  
 XX PI Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;  
 XX PR WPI; 2002-082995/11.  
 XX PT Novel polynucleotide which down regulates expression of Ets-related gene,  
 XX PT useful for treating cancer, diabetic retinopathy, macular degeneration,  
 XX PT arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.  
 XX PS Claim 4; Page 74; 149pp; English.  
 XX CC The invention relates to a nucleic acid molecule (I) which down regulates  
 CC expression of an Ets-related gene (ERG). (I) is useful for treating  
 CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,  
 CC tumour angiogenesis, diabetic retinopathy, macular degeneration,  
 CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca  
 CC vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge  
 CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu  
 CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for  
 CC treating a patient having a condition associated with the level of ERG,  
 CC by contacting cells of the patient with (I) under conditions suitable for  
 CC the treatment. The method comprises the use of one or more therapies  
 CC under conditions suitable for the treatment. Leukaemia or tumour  
 CC angiogenesis is treated by administering (I) to the patient in  
 CC conjunction with one or more of other therapies such as radiation or  
 CC chemotherapy treatment. (I) is useful for reducing ERG activity in a  
 CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of  
 CC ERG gene, by contacting (I) with RNA, in the presence of a divalent  
 CC cation such as Mg2+. (I) is useful for diagnosis of conditions and  
 CC diseases related to the expression of ERG, and as diagnostic tool to  
 CC examine genetic drift and mutations within diseased cells or to detect  
 CC the presence of ERG RNA in a cell. (I) is useful for specifically  
 CC targeting genes that share homology with ERG gene or ERG fusion genes.  
 CC ABK17354-ABK22719 represent nucleic acids, including antisense and  
 CC enzymatic nucleic acid molecules which regulate expression of ERG, and  
 CC related PCR primers of the invention  
 XX SQ Sequence 17 BP; 2 A; 13 C; 1 G; 0 T; 1 U; 0 Other;  
 Query Match 0.6%; Score 12.4; DB 1; Length 17;  
 Best Local Similarity 85.7%; Pred. No. 5.3e-02;  
 Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;  
 QY 1136 CCTCAGCTCCACC 1149  
 |||||  
 Db 1 CCUACGCCACC 14  
 RESULT 536  
 ABK18365/c  
 ID ABK18365 standard; RNA; 17 BP.  
 XX AC ABK18365;  
 XX DT 09-APR-2002 (first entry)  
 XX DE Human ERG hammerhead ribozyme target sequence, Seq ID No 1012.  
 KW Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;  
 KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;  
 KW vulnary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;  
 KW tumour angiogenesis; diabetic retinopathy; macular degeneration;  
 KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;  
 KW angiofibroma of tuberous sclerosis; port-wine stain; wound healing;

KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;  
 KW Osler-Weber-rendu syndrome; leukaemia; osteoporosis; DNAzyme; inozyme;  
 XX amBerzyme.  
 XX OS Homo sapiens.  
 XX XX WO200188124-A2.  
 XX PD 22-NOV-2001.  
 XX PF 16-MAY-2001; 2001WO-US015866.  
 XX PR 16-MAY-2000; 2000US-00572021.  
 XX PA (RIBO-) RIBOZYME PHARM INC.  
 XX PA (GLAX) GLAXO GROUP LTD.  
 XX PI Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;  
 XX PR WPI; 2002-082995/11.  
 XX PT Novel polynucleotide which down regulates expression of Ets-related gene,  
 XX PT useful for treating cancer, diabetic retinopathy, macular degeneration,  
 XX PT arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.  
 XX PS Claim 4; Page 77; 149pp; English.  
 XX CC The invention relates to a nucleic acid molecule (I) which down regulates  
 CC expression of an Ets-related gene (ERG). (I) is useful for treating  
 CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,  
 CC tumour angiogenesis, diabetic retinopathy, macular degeneration,  
 CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca  
 CC vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge  
 CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu  
 CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for  
 CC treating a patient having a condition associated with the level of ERG,  
 CC by contacting cells of the patient with (I) under conditions suitable for  
 CC the treatment. The method comprises the use of one or more therapies  
 CC under conditions suitable for the treatment. Leukaemia or tumour  
 CC angiogenesis is treated by administering (I) to the patient in  
 CC conjunction with one or more of other therapies such as radiation or  
 CC chemotherapy treatment. (I) is useful for reducing ERG activity in a  
 CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of  
 CC ERG gene, by contacting (I) with RNA, in the presence of a divalent  
 CC cation such as Mg2+. (I) is useful for diagnosis of conditions and  
 CC diseases related to the expression of ERG, and as diagnostic tool to  
 CC examine genetic drift and mutations within diseased cells or to detect  
 CC the presence of ERG RNA in a cell. (I) is useful for specifically  
 CC targeting genes that share homology with ERG gene or ERG fusion genes.  
 CC ABK17354-ABK22719 represent nucleic acids, including antisense and  
 CC enzymatic nucleic acid molecules which regulate expression of ERG, and  
 CC related PCR primers of the invention  
 XX SQ Sequence 17 BP; 2 A; 3 C; 6 G; 0 T; 6 U; 0 Other;  
 Query Match 0.6%; Score 12.4; DB 1; Length 17;  
 Best Local Similarity 92.9%; Pred. No. 5.3e-02;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 752 GCACCTGCCATGCA 765  
 |||||  
 Db 14 GCACATGCCATGCA 1  
 RESULT 537  
 ABK18820  
 ID ABK18820 standard; RNA; 17 BP.  
 XX AC ABK18820;  
 XX DT 09-APR-2002 (first entry)  
 XX DE Human ERG DNAzyme target sequence Seq ID No 1467.

XX Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;  
 KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;  
 KW vulvular; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;  
 KW tumour angiogenesis; diabetic retinopathy; macular degeneration;  
 KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;  
 KW angiofibroma of tuberosus sclerosus; port-wine stain; wound healing;  
 KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;  
 KW Osler-Weber-rendu syndrome; leukaemia; osteoporosis; DNazyme; inozyme;  
 KW amberyne.  
 XX Homo sapiens.  
 XX WO2001:88124-A2.  
 XX 22-NOV-2001.  
 XX 16-MAY-2001; 2001WO-US015866.  
 XX 16-MAY-2000; 2000US-00572021.  
 XX (RIBO-) RIBOZYME PHARM INC.  
 XX (GLAX) GLAXO GROUP LTD.  
 XX Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;  
 XX WPI; 2002-082995/11.  
 XX Novel polynucleotide which down regulates expression of Ets-related gene,  
 PT useful for treating cancer, diabetic retinopathy, macular degeneration,  
 PT arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.  
 XX Claim 4; Page 92; 149pp; English.  
 XX The invention relates to a nucleic acid molecule (I) which down regulates  
 CC expression of an Ets-related gene (ERG). (I) is useful for treating  
 CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,  
 CC tumour angiogenesis, diabetic retinopathy, macular degeneration,  
 CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca  
 CC vulgaris, angiofibroma of tuberosus sclerosus, port-wine stains, Sturge  
 CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu  
 CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for  
 CC treating a patient having a condition associated with the level of ERG,  
 CC by contacting cells of the patient with (I) under conditions suitable for  
 CC the treatment. The method comprises the use of one or more therapies  
 CC under conditions suitable for the treatment. Leukaemia or tumour  
 CC angiogenesis is treated by administering (I) to the patient in  
 CC conjunction with one or more of other therapies such as radiation or  
 CC chemotherapy treatment. (I) is useful for reducing ERG activity in a  
 CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of  
 CC ERG gene, by contacting (I) with RNA, in the presence of a divalent  
 CC cation such as Mg2+. (I) is useful for diagnosis of conditions and  
 CC diseases related to the expression of ERG, and as diagnostic tool to  
 CC examine genetic drift and mutations within diseased cells or to detect  
 CC the presence of ERG RNA in a cell. (I) is useful for specifically  
 CC targeting genes that share homology with ERG gene or ERG fusion genes.  
 CC ABK17354-ABK22719 represent nucleic acids, including antisense and  
 CC enzymatic nucleic acid molecules which regulate expression of ERG, and  
 CC related PCR primers of the invention  
 XX Sequence 17 BP; 2 A; 12 C; 2 G; 0 T; 1 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 17;  
 Best Local Similarity 85.7%; Pred. No. 5.3e+02;  
 Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;  
 QY 1136 CCTCCAGCTCCACC 1149  
 ||:|||||  
 Db 3 CCUCCAGCCACC 16

RESULT 538  
 ABZ81920/c

ID ABZ81920 standard; DNA; 17 BP.  
 XX AC ABZ81920;  
 XX 11-JUN-2003 (first entry)  
 XX SP011 gene forward PCR primer.  
 DE SP011; meiosis; recombination; reverse breeding; haploid; hybrid seed;  
 XX cytoplasmic male sterility; plant; PCR; primer; ss.  
 KW Arabidopsis thaliana.  
 XX OS WO2003017753-A2.  
 XX PN 06-MAR-2003.  
 XX PD 23-AUG-2002; 2002WO-EP009526.  
 XX PF 23-AUG-2001; 2001EP-00203193.  
 XX PR 12-FEB-2002; 2002EP-00075582.  
 XX (RIJK-) RIJK ZWAAN ZAARTEELT & ZAARDHANDEL BV.  
 XX PA Dirks RHG, Van Dun CMP, Reinink K;  
 XX PT WPI; 2003-278599/27.  
 XX DR Efficiently producing homozygous organisms from a heterozygous starting  
 XX organism, e.g. animal or plant, useful for plant breeding, comprises  
 PT creating homozygous organisms from the haploid cells produced by the  
 PT starting organism.  
 XX Example 3; Page 59; 100pp; English.

XX The present sequence is a forward primer for the SP011 gene, which is  
 CC involved in the formation of double-strand breaks during recombination.  
 CC It is used with the reverse primer given in ABZ81921. The primers  
 CC correspond to a position of the Arabidopsis thaliana SP011-1 genomic DNA  
 CC which encodes a stretch of amino acids which is highly conserved between  
 CC known SP011 orthologues of different species. They were used to amplify  
 CC SP011 gene fragments from Brassica oleracea and Brassica carinata (see  
 CC also ABZ81913-14). The invention relates to a method of efficiently  
 CC producing homozygous organisms (plants, fungi or animals) from a  
 CC heterozygous starting organism. This involves producing haploid cells  
 CC from the heterozygous starting organism and creating homozygous organisms  
 CC from the haploid cells. Recombination is prevented or suppressed during  
 CC haploid production such that the normal variation that arises in every  
 CC natural cross can be limited or avoided and the number of haploid cells  
 CC having different sets of chromosomes is reduced. Recombination is  
 CC prevented or suppressed by interfering with one or more target genes  
 CC involved in recombination, such as the SP011 gene. This is achieved using  
 CC antisense RNA, RNA interference (RNAi) molecules, virus induced gene  
 CC silencing, RNA oligonucleotides or DNA oligonucleotides. The method  
 CC relates in particular to plant breeding to produce parental lines for the  
 CC production of hybrid offspring, and its use for the transfer of  
 CC cytoplasmic male sterility and for the production of F1 hybrid seed is  
 CC claimed. The present primer pair can be used to select SP011 genes for  
 CC use in the method  
 XX Sequence 17 BP; 3 A; 1 C; 9 G; 4 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 17;  
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1252 CCCATCCCCAACCC 1265  
 ||:|||||  
 Db 17 CCCATCCCCAACCC 4

RESULT 539  
 ABT36385



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DT 12-JUN-2003 (first entry)
XX Tumour suppression related human fukutin oligo SEQ ID No 3172.
DE Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
XX antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizophrenia; protein chip; gene therapy; tumour suppression;
KW human fukutin; ds.
XX Homo sapiens.
OS WO2003025175-A2.
XX 27-MAR-2003.
XX 17-SEP-2002; 2002WO-IB004208.
XX 17-SEP-2001; 2001FR-00011978.
XX (MOLE-) MOLECULAR ENGINES LAB.
XX Telerman A, Amson R, Tuijnder M;
XX WPI; 2003-313353/30.
XX New isolated nucleic acid, useful for treating viral diseases associated
XX with tumors and cell degeneration, also related polypeptides, antibodies
XX and transfected cells.
XX Disclosure; Page 404; 720pp; French.
XX The invention relates to a novel isolated 17 mer nucleic acid sequence,
XX given in the specification, a sequence containing at least 15 consecutive
XX nucleotides from the 17 mer sequence, a sequence with, after optimal
XX alignment, at least 80 % identity to the 17 mer sequence, a sequence that
XX hybridizes to them under highly stringent conditions, or the complement
XX of any of them, or the corresponding RNA. The novel isolated nucleic
XX acids of the invention are useful as probes and primers for detecting,
XX identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
XX component of a gene chip, in vitro as (anti)sense reagents, and for
XX production of recombinant polypeptides. Any of the nucleic acids,
XX polypeptides, vectors containing the nucleic acids, cells containing the
XX vector or antibodies directed against the polypeptides are useful for
XX preparation of pharmaceuticals for prevention and/or treatment of viral
XX diseases that are characterised by development of tumours or cell
XX degeneration, specifically cancer but also Alzheimer's disease and
XX schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
XX patient samples is useful for diagnosis and/or prognosis of these
XX diseases. The polypeptides can also be used to generate antibodies, and
XX both the polypeptide and antibodies are useful as components of protein
XX chips. The nucleic acid sequences of the invention can be used in gene
XX therapy. This polynucleotide sequence represents a tumour suppression
XX related human fukutin oligonucleotide of the invention
XX
SQ Sequence 17 BP; 4 A; 4 C; 7 G; 2 T; 0 U; 0 Other;
Query Match 0.6%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 5.3e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1185 CCGCAGAGAGGTGG 1198
DB 4 CCGCAGAGAGGTGG 17
RESULT 542
ABT38343
ID ABT38343 standard; DNA; 17 BP.
XX AC ABT38343;
XX DT 12-JUN-2003 (first entry)
XX
DE Tumour suppression related human fukutin oligo SEQ ID No 3980.
XX Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizophrenia; protein chip; gene therapy; tumour suppression;
KW human fukutin; ds.
XX Homo sapiens.
OS WO2003025175-A2.
XX 27-MAR-2003.
XX 17-SEP-2002; 2002WO-IB004208.
XX 17-SEP-2001; 2001FR-00011978.
XX (MOLE-) MOLECULAR ENGINES LAB.
XX Telerman A, Amson R, Tuijnder M;
XX WPI; 2003-313353/30.
XX New isolated nucleic acid, useful for treating viral diseases associated
XX with tumors and cell degeneration, also related polypeptides, antibodies
XX and transfected cells.
XX Disclosure; Page 499; 720pp; French.
XX The invention relates to a novel isolated 17 mer nucleic acid sequence,
XX given in the specification, a sequence containing at least 15 consecutive
XX nucleotides from the 17 mer sequence, a sequence with, after optimal
XX alignment, at least 80 % identity to the 17 mer sequence, a sequence that
XX hybridizes to them under highly stringent conditions, or the complement
XX of any of them, or the corresponding RNA. The novel isolated nucleic
XX acids of the invention are useful as probes and primers for detecting,
XX identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
XX component of a gene chip, in vitro as (anti)sense reagents, and for
XX production of recombinant polypeptides. Any of the nucleic acids,
XX polypeptides, vectors containing the nucleic acids, cells containing the
XX vector or antibodies directed against the polypeptides are useful for
XX preparation of pharmaceuticals for prevention and/or treatment of viral
XX diseases that are characterised by development of tumours or cell
XX degeneration, specifically cancer but also Alzheimer's disease and
XX schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
XX patient samples is useful for diagnosis and/or prognosis of these
XX diseases. The polypeptides can also be used to generate antibodies, and
XX both the polypeptide and antibodies are useful as components of protein
XX chips. The nucleic acid sequences of the invention can be used in gene
XX therapy. This polynucleotide sequence represents a tumour suppression
XX related human fukutin oligonucleotide of the invention
XX
SQ Sequence 17 BP; 7 A; 3 C; 5 G; 2 T; 0 U; 0 Other;
Query Match 0.6%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 5.3e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1010 CACCTGAAAAGAG 1023
DB 4 CACCTGAAAAGAG 17
RESULT 543
ABT38750/c
ID ABT38750 standard; DNA; 17 BP.
XX AC ABT38750;
XX DT 12-JUN-2003 (first entry)
XX
DE Tumour suppression related human fukutin oligo SEQ ID No 4387.
XX
```

KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;  
 KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;  
 KW schizophrenia; protein chip; gene therapy; tumour suppression;  
 KW human fukutin; ds.  
 OS Homo sapiens.  
 PN WO2003025175-A2.  
 XX 27-MAR-2003.  
 XX 17-SEP-2002; 2002WO-IB004208.  
 XX 17-SEP-2001; 2001FR-00011978.  
 XX (MOLE-) MOLECULAR ENGINES LAB.  
 XX Telerman A, Anson R, Tuijnder M;  
 XX WPI; 2003-313353/30.  
 XX New isolated nucleic acid, useful for treating viral diseases associated  
 PT with tumors and cell degeneration, also related polypeptides, antibodies  
 PT and transfected cells.  
 XX Disclosure; Page 546; 720pp; French.  
 XX The invention relates to a novel isolated 17 mer nucleic acid sequence,  
 CC given in the specification, a sequence containing at least 15 consecutive  
 CC nucleotides from the 17 mer sequence, a sequence with, after optimal  
 CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that  
 CC hybridizes to them under highly stringent conditions, or the complement  
 CC of any of them, or the corresponding RNA. The novel isolated nucleic  
 CC acids of the invention are useful as probes and primers for detecting,  
 CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one  
 CC component of a gene chip, in vitro as (anti)sense reagents, and for  
 CC production of recombinant polypeptides. Any of the nucleic acids,  
 CC polypeptides, vectors containing the nucleic acids, cells containing the  
 CC vector or antibodies directed against the polypeptides are useful for  
 CC preparation of pharmaceuticals for prevention and/or treatment of viral  
 CC diseases that are characterised by development of tumours or cell  
 CC degeneration, specifically cancer but also Alzheimer's disease and  
 CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in  
 CC patient samples is useful for diagnosis and/or prognosis of these  
 CC diseases. The polypeptides can also be used to generate antibodies, and  
 CC both the polypeptide and antibodies are useful as components of protein  
 CC chips. The nucleic acid sequences of the invention can be used in gene  
 CC therapy. This polynucleotide sequence represents a tumour suppression  
 CC related human fukutin oligonucleotide of the invention  
 XX Sequence 17 BP; 4 A; 1 C; 9 G; 3 T; 0 U; 0 Other;  
 XX Query Match 0.6%; Score 12.4; DB 1; Length 17;  
 XX Best Local Similarity 92.9%; Pred. No. 5.3e+02;  
 XX Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1258 CCCAACCCCTTCA 1271  
 DB 16 CCCAACCCCTTGA 3  
 RESULT 544  
 ID ACA06841/c  
 XX ACA06841 standard; RNA; 17 BP.  
 XX ACA06841;  
 XX 03-JUN-2003 (first entry)  
 XX NFKB sub-unit modulating inozyme substrate #660.  
 XX Enzymatic nucleic acid; nuclear factor kappa B; NFKB; inozyme; zinzyme;  
 KW G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human;

KW lung cancer; prostate cancer; colorectal cancer; brain cancer;  
 KW oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;  
 KW cervical cancer; head and neck cancer; ovarian cancer; melanoma;  
 KW lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;  
 KW chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate;  
 KW cyclophosphamide; doxorubin; fluorouracil carboplatin; edatrexate;  
 KW gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;  
 KW rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;  
 KW gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;  
 KW transplant/graft rejection; reperfusion injury; glomerulonephritis;  
 KW allergic airway inflammation; inflammatory bowel disease; infection; ss.  
 XX Homo sapiens.  
 OS US2002177568-A1.  
 XX 28-NOV-2002.  
 XX 23-MAY-2001; 2001US-00864785.  
 XX 07-DEC-1992; 92US-00987132.  
 XX 18-MAY-1994; 94US-00245466.  
 XX 15-AUG-1994; 94US-00281932.  
 XX 23-DEC-1996; 96US-00777916.  
 XX (STIN/) STINCHCOMB D T.  
 XX (MCSW/) MCSWIGGEN J.  
 XX (DRAP/) DRAPER K G.  
 XX Stinchcomb DT, Mcswiggen J, Draper KG;  
 XX WPI; 2003-340953/32.  
 XX Novel enzymatic nucleic acid molecules which down regulates expression of  
 PT a sequence encoding a subunit of nuclear factor kappa B useful for  
 PT treating cancer, inflammatory disorders and autoimmune diseases.  
 XX Claim 3; Page 36; 72pp; English.  
 XX The invention describes an enzymatic nucleic acid molecule (1) which down  
 CC regulates expression of a sequence encoding a subunit of nuclear factor  
 CC kappa B (NFKB), where (1) is an inozyme, zinzyme, G-cleaver or amberzyme  
 CC configuration. The enzymatic nucleic acid molecule is adapted to treat  
 CC cancer and is useful for down-regulating REL-A activity in a cell, for  
 CC treating a patient having a condition associated with the level of REL-A.  
 CC (1) is useful for cleaving RNA comprising a sequence of REL-A gene, in  
 CC the presence of a divalent cation, especially Mg<sup>2+</sup>. The enzymatic and  
 CC antisense nucleic acid molecules are useful for treating breast, lung,  
 CC prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,  
 CC cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or  
 CC multidrug resistant cancer. The method involves use of other drug  
 CC therapies such as monoclonal antibodies, REL-A-specific inhibitors or  
 CC chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,  
 CC cyclophosphamide, doxorubin, fluorouracil carboplatin, edatrexate,  
 CC gemcitabine or radiation therapy. The enzymatic and antisense nucleic  
 CC acid molecules are also useful for treating inflammatory disease such as  
 CC rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,  
 CC obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft  
 CC rejection, gene therapy applications, ischaemia/reperfusion injury  
 CC (central nervous system (CNS) and myocardial), glomerulonephritis,  
 CC sepsis, allergic airway inflammation, inflammatory bowel disease or  
 CC infection. This sequence represents the substrate of a novel enzymatic  
 CC nucleic acid molecule  
 XX Sequence 17 BP; 5 A; 5 C; 5 G; 0 T; 2 U; 0 Other;  
 XX Query Match 0.6%; Score 12.4; DB 1; Length 17;  
 XX Best Local Similarity 92.9%; Pred. No. 5.3e+02;  
 XX Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 887 CAGTGTCTGTGCC 900  
 DB 15 CAGTGTCTGTGCAC 2

RESULT 545  
 ID ACA07870/c  
 AC ACA07870;  
 XX  
 XX  
 DT 03-JUN-2003 (first entry)  
 XX  
 DE NFKB sub-unit modulating zincyme substrate #269.  
 XX  
 KW Enzymatic nucleic acid; nuclear factor kappa B; NFkB; inozyme; zincyme;  
 KW G-cleaver; amberyne; cancer; REL-A activity; breast cancer; human;  
 KW lung cancer; prostate cancer; colorectal cancer; brain cancer;  
 KW oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;  
 KW cervical cancer; head and neck cancer; ovarian cancer; melanoma;  
 KW lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;  
 KW chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate;  
 KW cyclophosphamide; doxorubicin; fluorouracil carboplatin; edatrexate;  
 KW gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;  
 KW rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;  
 KW gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;  
 KW transplant/graft rejection; reperfusion injury; glomerulonephritis;  
 KW allergic airway inflammation; inflammatory bowel disease; infection; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN US2002177568-A1.  
 XX  
 PD 28-NOV-2002.  
 XX  
 XX 23-MAY-2001; 2001US-00864785.  
 XX  
 PR 07-DEC-1992; 92US-00987132.  
 PR 18-MAY-1994; 94US-00245466.  
 PR 15-AUG-1994; 94US-00291932.  
 PR 23-DEC-1996; 96US-00777916.  
 XX  
 PA (STIN/) STINCHCOMB D T.  
 PA (MCSW/) MCSWIGGEN J.  
 PA (DRAP/) DRAPER K G.  
 XX  
 PI Stinchcomb DT, Mcswiggen J, Draper KG;  
 XX  
 DR WPI; 2003-340953/32.  
 XX  
 XX Novel enzymatic nucleic acid molecules which down regulates expression of  
 PT a sequence encoding a subunit of nuclear factor kappa B useful for  
 PT treating cancer, inflammatory disorders and autoimmune diseases.  
 XX  
 PS Claim 3; Page 41; 72pp; English.  
 XX  
 CC The invention describes an enzymatic nucleic acid molecule (I) which down  
 CC regulates expression of a sequence encoding a subunit of nuclear factor  
 CC kappa B (NFkB), where (I) is an inozyme, zincyme, G-cleaver or amberyne  
 CC configuration. The enzymatic nucleic acid molecule is adapted to treat  
 CC cancer and is useful for down-regulating REL-A activity in a cell, for  
 CC treating a patient having a condition associated with the level of REL-A.  
 CC (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in  
 CC the presence of a divalent cation, especially Mg<sup>2+</sup>. The enzymatic and  
 CC antisense nucleic acid molecules are useful for treating breast, lung,  
 CC prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,  
 CC cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or  
 CC multidrug resistant cancer. The method involves use of other drug  
 CC therapies such as monoclonal antibodies, REL-A-specific inhibitors or  
 CC chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,  
 CC cyclophosphamide, doxorubicin, fluorouracil carboplatin, edatrexate,  
 CC gemcitabine or radiation therapy. The enzymatic and antisense nucleic  
 CC acid molecules are also useful for treating inflammatory disease such as  
 CC rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,  
 CC obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft  
 CC rejection, gene therapy applications, ischaemia/reperfusion injury

CC (central nervous system (CNS) and myocardial), glomerulonephritis,  
 CC sepsis, allergic airway inflammation, inflammatory bowel disease or  
 CC infection. This sequence represents the substrate of a novel enzymatic  
 CC nucleic acid molecule  
 XX  
 SQ Sequence 17 BP; 4 A; 5 C; 5 G; 0 T; 3 U; 0 Other;  
 Query Match 0.6%; Score 12.4; DB 1; Length 17;  
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 887 CAGTGTCTTGTGCC 900  
 Db 1 14 CAGTGTCTTGTGCAC 1  
 RESULT 546  
 ACA08321/c  
 ID ACA08321 standard; DNA; 17 BP.  
 AC ACA08321;  
 XX  
 DT 03-JUN-2003 (first entry)  
 XX  
 DE Necrosis factor kappa B (NFkB) sub-unit modulating DNazyme #90.  
 XX  
 KW Enzymatic nucleic acid; nuclear factor kappa B; NFkB; inozyme; zincyme;  
 KW G-cleaver; amberyne; cancer; REL-A activity; breast cancer; lung cancer;  
 KW prostate cancer; colorectal cancer; brain cancer; oesophageal cancer;  
 KW stomach cancer; bladder cancer; pancreatic cancer; cervical cancer;  
 KW head and neck cancer; ovarian cancer; melanoma; lymphoma; glioma;  
 KW multidrug resistant cancer; REL-A-specific inhibitor; chemotherapy;  
 KW paclitaxel; docetaxel; cisplatin; methotrexate; cyclophosphamide;  
 KW doxorubicin; fluorouracil carboplatin; edatrexate; gemcitabine;  
 KW radiation therapy; inflammatory disease; asthma; diabetes;  
 KW rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;  
 KW gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;  
 KW transplant/graft rejection; reperfusion injury; glomerulonephritis;  
 KW allergic airway inflammation; inflammatory bowel disease; infection; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN US2002177568-A1.  
 XX  
 PD 28-NOV-2002.  
 XX  
 XX 23-MAY-2001; 2001US-00864785.  
 XX  
 PR 07-DEC-1992; 92US-00987132.  
 PR 18-MAY-1994; 94US-00245466.  
 PR 15-AUG-1994; 94US-00291932.  
 PR 23-DEC-1996; 96US-00777916.  
 XX  
 PA (STIN/) STINCHCOMB D T.  
 PA (MCSW/) MCSWIGGEN J.  
 PA (DRAP/) DRAPER K G.  
 XX  
 PI Stinchcomb DT, Mcswiggen J, Draper KG;  
 XX  
 DR WPI; 2003-340953/32.  
 XX  
 XX Novel enzymatic nucleic acid molecules which down regulates expression of  
 PT a sequence encoding a subunit of nuclear factor kappa B useful for  
 PT treating cancer, inflammatory disorders and autoimmune diseases.  
 XX  
 PS Claim 3; Page 48; 72pp; English.  
 XX  
 CC The invention describes an enzymatic nucleic acid molecule (I) which down  
 CC regulates expression of a sequence encoding a subunit of nuclear factor  
 CC kappa B (NFkB), where (I) is an inozyme, zincyme, G-cleaver or amberyne  
 CC configuration. The enzymatic nucleic acid molecule is adapted to treat  
 CC cancer and is useful for down-regulating REL-A activity in a cell, for  
 CC treating a patient having a condition associated with the level of REL-A.  
 CC (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in  
 CC the presence of a divalent cation, especially Mg<sup>2+</sup>. The enzymatic and  
 CC antisense nucleic acid molecules are useful for treating breast, lung,  
 CC prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,  
 CC cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or  
 CC multidrug resistant cancer. The method involves use of other drug  
 CC therapies such as monoclonal antibodies, REL-A-specific inhibitors or  
 CC chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,  
 CC cyclophosphamide, doxorubicin, fluorouracil carboplatin, edatrexate,  
 CC gemcitabine or radiation therapy. The enzymatic and antisense nucleic  
 CC acid molecules are also useful for treating inflammatory disease such as  
 CC rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,  
 CC obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft  
 CC rejection, gene therapy applications, ischaemia/reperfusion injury



CC (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in  
 CC the presence of a divalent cation, especially Mg<sup>2+</sup>. The enzymatic and  
 CC antisense nucleic acid molecules are useful for treating breast, lung,  
 CC prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,  
 CC cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or  
 CC multidrug resistant cancer. The method involves use of other drug  
 CC therapies such as monoclonal antibodies, REL-A-specific inhibitors or  
 CC chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,  
 CC cyclophosphamide, doxorubicin, fluorouracil carboplatin, edatrexate,  
 CC gemcitabine or radiation therapy. The enzymatic and antisense nucleic  
 CC acid molecules are also useful for treating inflammatory disease such as  
 CC rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,  
 CC obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft  
 CC rejection, gene therapy applications, ischaemia/reperfusion injury  
 CC (central nervous system (CNS) and myocardial), glomerulonephritis,  
 CC sepsis, allergic airway inflammation, inflammatory bowel disease or  
 CC infection. This sequence represents an enzymatic nucleic acid used to  
 CC modulate the function of a necrosis factor kappa B sub-unit  
 XX Sequence 17 BP; 6 A; 5 C; 4 G; 0 T; 2 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 17;

Best Local Similarity 92.9%; Pred. No. 5.3e+02;

Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 887 CAGTGTCTGTGCCC 900

|||||  
 Db 17 CAGTGTCTGTGCAC 4

RESULT 547

ACA09069/c

ID ACA09069 standard; RNA; 17 BP.

AC ACA09069;

XX 03-JUN-2003 (first entry)

DE NFkB sub-unit modulating amberzyme substrate #232.

KW Enzymatic nucleic acid; nuclear factor kappa B; NFkB; inozyme; zinzyme;  
 KW G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human;  
 KW lung cancer; prostate cancer; colorectal cancer; brain cancer;  
 KW oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;  
 KW cervical cancer; head and neck cancer; ovarian cancer; melanoma;  
 KW lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;  
 KW chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate;  
 KW cyclophosphamide; doxorubicin; fluorouracil carboplatin; edatrexate;  
 KW gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;  
 KW rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;  
 KW gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;  
 KW transplant/graft rejection; reperfusion injury; glomerulonephritis;  
 KW allergic airway inflammation; inflammatory bowel disease; infection; ss.

OS Homo sapiens.

XX US2002177568-A1.

XX 28-NOV-2002.

PF 23-MAY-2001; 2001US-00864785.

XX 07-DEC-1992; 92US-00987132.

PR 18-MAY-1994; 94US-00245466.

PR 15-AUG-1994; 94US-00291932.

PR 23-DEC-1996; 96US-00777916.

XX (STIN/) STINCHOMB D T.

PA (MCSW/) MCSWIGGEN J.

PA (DRAP/) DRAPER K G.

XX Stinchcomb DT, Meswiggen J, Draper KG;

DR WPI; 2003-340953/32.

XX Novel enzymatic nucleic acid molecules which down regulates expression of  
 PT a sequence encoding a subunit of nuclear factor kappa B useful for  
 PT treating cancer, inflammatory disorders and autoimmune diseases.

XX Claim 3; Page 55; 72pp; English.

XX The invention describes an enzymatic nucleic acid molecule (I) which down  
 CC regulates expression of a sequence encoding a subunit of nuclear factor  
 CC kappa B (NFkB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme  
 CC configuration. The enzymatic nucleic acid molecule is adapted to treat  
 CC cancer and is useful for down-regulating REL-A activity in a cell, for  
 CC treating a patient having a condition associated with the level of REL-A.  
 CC (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in  
 CC the presence of a divalent cation, especially Mg<sup>2+</sup>. The enzymatic and  
 CC antisense nucleic acid molecules are useful for treating breast, lung,  
 CC prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,  
 CC cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or  
 CC multidrug resistant cancer. The method involves use of other drug  
 CC therapies such as monoclonal antibodies, REL-A-specific inhibitors or  
 CC chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,  
 CC cyclophosphamide, doxorubicin, fluorouracil carboplatin, edatrexate,  
 CC gemcitabine or radiation therapy. The enzymatic and antisense nucleic  
 CC acid molecules are also useful for treating inflammatory disease such as  
 CC rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,  
 CC obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft  
 CC rejection, gene therapy applications, ischaemia/reperfusion injury  
 CC (central nervous system (CNS) and myocardial), glomerulonephritis,  
 CC sepsis, allergic airway inflammation, inflammatory bowel disease or  
 CC infection. This sequence represents the substrate of a novel enzymatic  
 CC nucleic acid molecule  
 XX Sequence 17 BP; 3 A; 4 C; 8 G; 0 T; 2 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 17;

Best Local Similarity 92.9%; Pred. No. 5.3e+02;

Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1085 CAGGCTTCACCCCC 1098

|||||  
 Db 16 CAGGCGTCACCCCC 3

RESULT 548

ACA06257

ID ACA06257 standard; RNA; 17 BP.

XX ACA06257;

XX 03-JUN-2003 (first entry)

DE NFkB sub-unit modulating inozyme substrate #76.

KW Enzymatic nucleic acid; nuclear factor kappa B; NFkB; inozyme; zinzyme;  
 KW G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human;  
 KW lung cancer; prostate cancer; colorectal cancer; brain cancer;  
 KW oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;  
 KW cervical cancer; head and neck cancer; ovarian cancer; melanoma;  
 KW lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;  
 KW chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate;  
 KW cyclophosphamide; doxorubicin; fluorouracil carboplatin; edatrexate;  
 KW gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;  
 KW rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;  
 KW gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;  
 KW transplant/graft rejection; reperfusion injury; glomerulonephritis;  
 KW allergic airway inflammation; inflammatory bowel disease; infection; ss.

OS Homo sapiens.

XX US2002177568-A1.

XX 28-NOV-2002.



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XX PF 23-MAY-2001; 2001US-00864785.
XX PR 07-DEC-1992; 92US-00987132.
XX PR 18-MAY-1994; 94US-00245466.
XX PR 15-AUG-1994; 94US-00291932.
XX PR 23-DEC-1996; 96US-00777916.
XX PA (STIN/) STINCHOMB D T.
XX PA (MCSW/) MCSWIGGEN J.
XX PA (DRAP/) DRAPER K G.
XX PI Stinchcomb DT, Mcswiggen J, Draper KG;
XX DR WPI; 2003-340953/32.
XX PT Novel enzymatic nucleic acid molecules which down regulates expression of
XX PT a sequence encoding a subunit of nuclear factor kappa B useful for
XX PT treating cancer, inflammatory disorders and autoimmune diseases.
XX PS Claim 3; Page 28; 72pp; English.
XX CC The invention describes an enzymatic nucleic acid molecule (I) which down
XX CC regulates expression of a sequence encoding a subunit of nuclear factor
XX CC kappa B (NFkB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme
XX CC configuration. The enzymatic nucleic acid molecule is adapted to treat
XX CC cancer and is useful for down-regulating REL-A activity in a cell, for
XX CC treating a patient having a condition associated with the level of REL-A.
XX CC (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in
XX CC the presence of a divalent cation, especially Mg2+. The enzymatic and
XX CC antisense nucleic acid molecules are useful for treating breast, lung,
XX CC prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,
XX CC cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or
XX CC multidrug resistant cancer. The method involves use of other drug
XX CC therapies such as monoclonal antibodies, REL-A-specific inhibitors or
XX CC chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,
XX CC cyclophosphamide, doxorubin, fluorouracil carboplatin, edatrexate,
XX CC gemcitabine or radiation therapy. The enzymatic and antisense nucleic
XX CC acid molecules are also useful for treating inflammatory disease such as
XX CC rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,
XX CC obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft
XX CC rejection, gene therapy applications, ischaemia/reperfusion injury
XX CC (central nervous system (CNS) and myocardial), glomerulonephritis,
XX CC sepsis, allergic airway inflammation, inflammatory bowel disease or
XX CC infection. This sequence represents the substrate of a novel enzymatic
XX CC nucleic acid molecule
XX SQ Sequence 17 BP; 3 A; 9 C; 4 G; 0 T; 1 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 17;
Best Local Similarity 85.7%; Pred. No. 5.3e+02;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1087 GGCTTCACCCCCAC 1100
DB 1 GGCTTCACCCCCAC 14

RESULT 549
ACA08289/c
ID ACA08289 standard; DNA; 17 BP.
XX AC ACA08289;
XX DT
XX TT 03-JUN-2003 (first entry)
XX DE Necrosis factor kappa B (NFkB) sub-unit modulating DNase #58.
XX CC Enzymatic nucleic acid; nuclear factor kappa B; NFkB; inozyme; zinzyme;
XX KW G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; lung cancer;
XX KW prostate cancer; colorectal cancer; brain cancer; oesophageal cancer;
XX KW stomach cancer; bladder cancer; pancreatic cancer; cervical cancer;
XX KW head and neck cancer; ovarian cancer; melanoma; lymphoma; glioma;

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KW multidrug resistant cancer; REL-A-specific inhibitor; chemotherapy;
KW paclitaxel; docetaxel; cisplatin; methotrexate; cyclophosphamide;
KW doxorubin; fluorouracil carboplatin; edatrexate; gemcitabine;
KW radiation therapy; inflammatory disease; asthma; diabetes;
KW rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;
KW gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;
KW transplant/graft rejection; reperfusion injury; glomerulonephritis;
KW allergic airway inflammation; inflammatory bowel disease; infection; ss.
XX OS Synthetic.
XX PN US2002177568-A1.
XX PD 28-NOV-2002.
XX PF 23-MAY-2001; 2001US-00864785.
XX PR 07-DEC-1992; 92US-00987132.
XX PR 18-MAY-1994; 94US-00245466.
XX PR 15-AUG-1994; 94US-00291932.
XX PR 23-DEC-1996; 96US-00777916.
XX PA (STIN/) STINCHOMB D T.
XX PA (MCSW/) MCSWIGGEN J.
XX PA (DRAP/) DRAPER K G.
XX PI Stinchcomb DT, Mcswiggen J, Draper KG;
XX DR WPI; 2003-340953/32.
XX PT Novel enzymatic nucleic acid molecules which down regulates expression of
XX PT a sequence encoding a subunit of nuclear factor kappa B useful for
XX PT treating cancer, inflammatory disorders and autoimmune diseases.
XX PS Claim 3; Page 47; 72pp; English.
XX CC The invention describes an enzymatic nucleic acid molecule (I) which down
XX CC regulates expression of a sequence encoding a subunit of nuclear factor
XX CC kappa B (NFkB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme
XX CC configuration. The enzymatic nucleic acid molecule is adapted to treat
XX CC cancer and is useful for down-regulating REL-A activity in a cell, for
XX CC treating a patient having a condition associated with the level of REL-A.
XX CC (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in
XX CC the presence of a divalent cation, especially Mg2+. The enzymatic and
XX CC antisense nucleic acid molecules are useful for treating breast, lung,
XX CC prostate, colorectal, brain, oesophageal, stomach, bladder, lymphoma, glioma or
XX CC multidrug resistant cancer. The method involves use of other drug
XX CC therapies such as monoclonal antibodies, REL-A-specific inhibitors or
XX CC chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,
XX CC cyclophosphamide, doxorubin, fluorouracil carboplatin, edatrexate,
XX CC gemcitabine or radiation therapy. The enzymatic and antisense nucleic
XX CC acid molecules are also useful for treating inflammatory disease such as
XX CC rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,
XX CC obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft
XX CC rejection, gene therapy applications, ischaemia/reperfusion injury
XX CC (central nervous system (CNS) and myocardial), glomerulonephritis,
XX CC sepsis, allergic airway inflammation, inflammatory bowel disease or
XX CC infection. This sequence represents an enzymatic nucleic acid used to
XX CC modulate the function of a necrosis factor kappa B sub-unit
XX SQ Sequence 17 BP; 2 A; 5 C; 8 G; 0 T; 2 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 5.3e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1085 CAGGCTTCACCCCC 1098
DB 15 CAGGCTTCACCCCC 2

```

RESULT 550

KW	ABZ61864/c
XX	ID ABZ61864 standard; RNA; 17 BP.
OS	AC ABZ61864;
XX	AC ABZ61864;
PN	DT 21-MAR-2003 (first entry)
XX	DE Human H-Ras DNzyme target #655.
XX	DE Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
XX	KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytosstatic; anti-HIV;
XX	KW anti-rheumatic; cancer; AIDS; ss.
XX	OS Homo sapiens.
XX	WO200297114-A2.
PN	PD 05-DEC-2002.
XX	PF 29-MAY-2002; 2002WO-USO16840.
XX	PP Novel short interfering RNA and enzymatic nucleic acid useful for
XX	PR treating cancer, modulates the expression of a nucleic acid encoding
XX	PR HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX	PS Claim 4; Page 140; 185pp; English.
XX	The invention relates to a novel short interfering RNA (siRNA) nucleic
CC	acid molecule or an enzymatic nucleic acid molecule, that modulates
CC	expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC	human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC	acid molecule of the invention has cytostatic, anti-HIV, and anti-
CC	rheumatic activity. The nucleic acid molecules are useful for reducing
CC	HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC	also useful for treating breast, ovarian, colorectal, lung, prostate,
CC	bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC	shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC	ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC	ribozymes of the invention
SQ	Sequence 17 BP; 1 A; 4 C; 7 G; 0 T; 5 U; 0 Other;
Query Match	0.6%; Score 12.4; DB 1; Length 17;
Best Local Similarity	92.9%; Pred.No. 5.3e+02;
Matches	13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY	1180 GCTCCCCGCGAGAGA 1193
DB	17 GCTCCCAGCAGAGA 4
RESULT 551	
ABZ64930	
ID	ABZ64930 standard; RNA; 17 BP.
XX	AC ABZ64930;
XX	AC ABZ64930;
XX	DT 21-MAR-2003 (first entry)
XX	DE Human HER2 DNzyme substrate #387.
XX	Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
XX	KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytosstatic; anti-HIV;
XX	KW anti-rheumatic; cancer; AIDS; ss.
XX	OS Homo sapiens.
XX	WO200297114-A2.
PN	PD 05-DEC-2002.
XX	PF 29-MAY-2002; 2002WO-USO16840.
XX	PP Novel short interfering RNA and enzymatic nucleic acid useful for
XX	PR treating cancer, modulates the expression of a nucleic acid encoding
XX	PR HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX	PS Claim 58; Page 123; 185pp; English.
XX	The invention relates to a novel short interfering RNA (siRNA) nucleic
CC	acid molecule or an enzymatic nucleic acid molecule, that modulates
CC	expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC	human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC	acid molecule of the invention has cytostatic, anti-HIV, and anti-
CC	rheumatic activity. The nucleic acid molecules are useful for reducing
CC	HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC	also useful for treating breast, ovarian, colorectal, lung, prostate,
CC	bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC	shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC	ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC	ribozymes of the invention
SQ	Sequence 17 BP; 1 A; 4 C; 7 G; 0 T; 5 U; 0 Other;
Query Match	0.6%; Score 12.4; DB 1; Length 17;
Best Local Similarity	92.9%; Pred.No. 5.3e+02;
Matches	13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY	1180 GCTCCCCGCGAGAGA 1193
DB	17 GCTCCCAGCAGAGA 4
RESULT 551	
ABZ64930	
ID	ABZ64930 standard; RNA; 17 BP.
XX	AC ABZ64930;
XX	AC ABZ64930;
XX	DT 21-MAR-2003 (first entry)
XX	DE Human HER2 DNzyme substrate #387.
XX	Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
XX	KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytosstatic; anti-HIV;
XX	KW anti-rheumatic; cancer; AIDS; ss.
XX	OS Homo sapiens.
XX	WO200297114-A2.
PN	PD 05-DEC-2002.
XX	PF 29-MAY-2002; 2002WO-USO16840.
XX	PP Novel short interfering RNA and enzymatic nucleic acid useful for
XX	PR treating cancer, modulates the expression of a nucleic acid encoding
XX	PR HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX	PS Claim 4; Page 140; 185pp; English.
XX	The invention relates to a novel short interfering RNA (siRNA) nucleic
CC	acid molecule or an enzymatic nucleic acid molecule, that modulates
CC	expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC	human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC	acid molecule of the invention has cytostatic, anti-HIV, and anti-
CC	rheumatic activity. The nucleic acid molecules are useful for reducing
CC	HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC	also useful for treating breast, ovarian, colorectal, lung, prostate,
CC	bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC	shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC	ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC	ribozymes of the invention
SQ	Sequence 17 BP; 1 A; 4 C; 7 G; 0 T; 5 U; 0 Other;
Query Match	0.6%; Score 12.4; DB 1; Length 17;
Best Local Similarity	92.9%; Pred.No. 5.3e+02;
Matches	13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY	1180 GCTCCCCGCGAGAGA 1193
DB	17 GCTCCCAGCAGAGA 4
RESULT 551	
ABZ64930	
ID	ABZ64930 standard; RNA; 17 BP.
XX	AC ABZ64930;
XX	AC ABZ64930;
XX	DT 21-MAR-2003 (first entry)
XX	DE Human HER2 DNzyme substrate #387.
XX	Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
XX	KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytosstatic; anti-HIV;
XX	KW anti-rheumatic; cancer; AIDS; ss.
XX	OS Homo sapiens.
XX	WO200297114-A2.
PN	PD 05-DEC-2002.
XX	PF 29-MAY-2002; 2002WO-USO16840.
XX	PP Novel short interfering RNA and enzymatic nucleic acid useful for
XX	PR treating cancer, modulates the expression of a nucleic acid encoding
XX	PR HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX	PS Claim 4; Page 140; 185pp; English.
XX	The invention relates to a novel short interfering RNA (siRNA) nucleic
CC	acid molecule or an enzymatic nucleic acid molecule, that modulates
CC	expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC	human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC	acid molecule of the invention has cytostatic, anti-HIV, and anti-
CC	rheumatic activity. The nucleic acid molecules are useful for reducing
CC	HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC	



CC also useful for treating breast, ovarian, colorectal, lung, prostate,  
 CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences  
 CC shown in ABZ5989 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,  
 CC ABZ66530 - ABZ66595 represent substrate/target sequences for the human  
 CC ribozymes of the invention

XX Sequence 17 BP; 3 A; 8 C; 5 G; 0 T; 1 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 17;

Best Local Similarity 85.7%; Pred. No. 5.3e+02;  
 Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1231 GCGACAGCCCTGCG 1244

DB 3 GCGACAGCCCUCC 16

RESULT 555

ACD50661

ID ACD50661 standard; RNA; 17 BP.

XX AC ACD50661;

XX 23-SEP-2003 (first entry)

XX HBV hammerhead ribozyme substrate sequence #178.

XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;

XX RNA stability; RNA expression; RNA synthesis; antisense;

XX enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;

XX amberyne; G-cleaver ribozyme; decoy molecule; aptamer;

XX HBV reverse transcriptase; Enhancer I region; viral replication;

XX degenerative; disease state; HBV infection; HCV infection; cirrhosis;

XX liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;

XX virucide; antiinflammatory; substrate; ss.

XX Hepatitis B virus.

XX WO200281494-A1.

XX 17-OCT-2002.

XX 26-MAR-2002; 2002WO-US009187.

XX 26-MAR-2001; 2001US-00817879.

XX 08-JUN-2001; 2001US-00877478.

XX 08-JUN-2001; 2001US-0296876P.

XX 24-OCT-2001; 2001US-0335059P.

XX 05-DEC-2001; 2001US-0337055P.

XX (RIBO-) RIBOZYME PHARM INC.

XX (BLAT/) BLATT L.

XX (MACE/) MACEJAK D.

XX (MCSW/) MCSWIGGEN J.

XX (PAVC/) PAVCO P.

XX (LEEP/) LEE P.

XX (DRAP/) DRAPER K.

XX (ROBE/) ROBERTS E.

XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;

XX Draper K, Roberts E;

XX WPI; 2003-229207/22.

XX Novel compound useful for treating cirrhosis, liver failure,

XX hepatocellular carcinoma, or condition associated with hepatitis C virus

XX infection.

XX Example 1; Page 139; 387pp; English.

XX The present invention relates to nucleic acid molecules which modulate

XX the synthesis, expression and/or stability of Hepatitis C virus (HCV) or

CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense  
 CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,  
 CC inozymes, zinzymes, amberyne, and G-cleaver ribozymes. Also disclosed  
 CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse  
 CC transcriptase and/or HBV reverse transcriptase primer sequences, as well  
 CC as oligonucleotides that specifically bind the Enhancer I region of HBV  
 CC DNA. The nucleic acids may be used to modulate the expression of HBV  
 CC genes and HBV viral replication. Also disclosed is a method for screening  
 CC compounds and/or potential therapies directed against HBV, and compounds  
 CC that modulate the expression and/or replication of HCV. The compounds and  
 CC methods of the invention are useful for the treatment of degenerative and  
 CC disease states related to HBV and HCV infection, replication and gene  
 CC expression such as cirrhosis, liver failure, and hepatocellular  
 CC carcinoma. The present sequence represents a substrate for one of the HBV  
 CC ribozyme, inozyme, G-cleaver, zinzyme, DNazyme or amberyne sequences  
 CC disclosed in the present invention

XX Sequence 17 BP; 2 A; 4 C; 1 G; 0 T; 10 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 17;

Best Local Similarity 28.6%; Pred. No. 5.3e+02;

Matches 4; Conservative 9; Mismatches 1; Indels 0; Gaps 0;

QY 907 ATTTCCTTTGGTCT 920

DB 4 AUUUUUUUUGUCU 17

RESULT 556

ACD65750

ID ACD65750 standard; RNA; 17 BP.

XX AC ACD65750;

XX 30-SEP-2003 (first entry)

XX HCV minus strand DNazyme substrate sequence #2213.

XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;

XX RNA stability; RNA expression; RNA synthesis; antisense;

XX enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;

XX amberyne; G-cleaver ribozyme; decoy molecule; aptamer;

XX HBV reverse transcriptase; Enhancer I region; viral replication;

XX degenerative; disease state; HBV infection; HCV infection; cirrhosis;

XX liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;

XX virucide; antiinflammatory; substrate; ss.

XX Hepatitis C virus.

XX WO200281494-A1.

XX 17-OCT-2002.

XX 26-MAR-2002; 2002WO-US009187.

XX 26-MAR-2001; 2001US-00817879.

XX 08-JUN-2001; 2001US-00877478.

XX 08-JUN-2001; 2001US-0296876P.

XX 24-OCT-2001; 2001US-0335059P.

XX 05-DEC-2001; 2001US-0337055P.

XX (RIBO-) RIBOZYME PHARM INC.

XX (BLAT/) BLATT L.

XX (MACE/) MACEJAK D.

XX (MCSW/) MCSWIGGEN J.

XX (MORR/) MORRISSEY D.

XX (PAVC/) PAVCO P.

XX (LEEP/) LEE P.

XX (DRAP/) DRAPER K.

XX (ROBE/) ROBERTS E.

XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;

XX Draper K, Roberts E;

XX WPI; 2003-229207/22.  
 XX Novel compound useful for treating cirrhosis, liver failure,  
 PT hepatocellular carcinoma, or condition associated with hepatitis C virus  
 PT infection.  
 XX  
 XX Claim 1; Page 314; 387pp; English.  
 XX  
 XX The present invention relates to nucleic acid molecules which modulate  
 CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or  
 CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense  
 CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,  
 CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed  
 CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse  
 CC transcriptase and/or HBV reverse transcriptase primer sequences, as well  
 CC as oligonucleotides that specifically bind the Enhancer I region of HBV  
 CC DNA. The nucleic acids may be used to modulate the expression of HBV  
 CC genes and HBV viral replication. Also disclosed is a method for screening  
 CC compounds and/or potential therapies directed against HBV, and compounds  
 CC that modulate the expression and/or replication of HCV. The compounds and  
 CC disease states related to HBV and HCV infection, replication and gene  
 CC expression such as cirrhosis, liver failure, and hepatocellular  
 CC carcinoma. The present sequence represents a substrate for one of the HCV  
 CC DNzyme or minus strand DNzyme sequences disclosed in the present  
 CC invention  
 XX  
 SQ Sequence 17 BP; 5 A; 6 C; 4 G; 0 T; 2 U; 0 Other;  
 Query Match 0.6%; Score 12.4; DB 1; Length 17;  
 Best Local Similarity 78.6%; Pred. No. 5.3e+02;  
 Matches 11; Conservative 2; Mismatches 1; Indels 0; Gaps 0;  
 QY 1200 ACCACCCCTATCAGG 1213  
 Db 1 AGCACCCUACAGG 14  
 RESULT 557  
 ACDS4040  
 ID ACD54040 standard; RNA; 17 BP.  
 AC ACD54040;  
 XX  
 XX 24-SEP-2003 (first entry)  
 XX  
 XX HBV zinzyme substrate sequence #159.  
 XX  
 XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;  
 KW RNA stability; RNA expression; RNA synthesis; antisense;  
 KW enzymatic nucleic acid; hammerhead ribozyme; DNzyme; inozyme; zinzyme;  
 KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;  
 KW HBV reverse transcriptase; Enhancer I region; viral replication;  
 KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;  
 KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;  
 KW virucide; antiinflammatory; substrate; ss.  
 XX  
 OS Hepatitis B virus.  
 XX  
 XX WO200281494-A1.  
 XX  
 XX 17-OCT-2002.  
 XX  
 XX 26-MAR-2002; 2002WO-US009187.  
 XX  
 XX 26-MAR-2001; 2001US-00817879.  
 PR 08-JUN-2001; 2001US-00877478.  
 PR 08-JUN-2001; 2001US-0296876P.  
 PR 24-OCT-2001; 2001US-0335059P.  
 PR 05-DEC-2001; 2001US-0337055P.  
 XX  
 XX (RIBO-) RIBOZYME PHARM INC.

PA (BLATT/) BLATT L.  
 PA (MACE/) MACEJAK D.  
 PA (MCSW/) MCSWIGGEN J.  
 PA (MORR/) MORRISSEY J.  
 PA (PAVC/) PAVCO P.  
 PA (LEEP/) LEE P.  
 PA (DRAP/) DRAPER K.  
 PA (ROBE/) ROBERTS E.  
 XX  
 PI Blatt L, Macejak D, Mcswiggen J, Morrissey J, Pavco P, Lee P;  
 PI Draper K, Roberts E;  
 XX WPI; 2003-229207/22.  
 XX Novel compound useful for treating cirrhosis, liver failure,  
 PT hepatocellular carcinoma, or condition associated with hepatitis C virus  
 PT infection.  
 XX  
 XX Example 1; Page 176; 387pp; English.  
 XX  
 XX The present invention relates to nucleic acid molecules which modulate  
 CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or  
 CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense  
 CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,  
 CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed  
 CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse  
 CC transcriptase and/or HBV reverse transcriptase primer sequences, as well  
 CC as oligonucleotides that specifically bind the Enhancer I region of HBV  
 CC DNA. The nucleic acids may be used to modulate the expression of HBV  
 CC genes and HBV viral replication. Also disclosed is a method for screening  
 CC compounds and/or potential therapies directed against HBV, and compounds  
 CC that modulate the expression and/or replication of HCV. The compounds and  
 CC disease states related to HBV and HCV infection, replication and gene  
 CC expression such as cirrhosis, liver failure, and hepatocellular  
 CC carcinoma. The present sequence represents a substrate for one of the HBV  
 CC ribozyme, inozyme, G-cleaver, zinzyme, DNzyme or amberzyme sequences  
 CC disclosed in the present invention  
 XX  
 SQ Sequence 17 BP; 2 A; 7 C; 6 G; 0 T; 2 U; 0 Other;  
 Query Match 0.6%; Score 12.4; DB 1; Length 17;  
 Best Local Similarity 78.6%; Pred. No. 5.3e+02;  
 Matches 11; Conservative 2; Mismatches 1; Indels 0; Gaps 0;  
 QY 1084 CCAGGCTTACCCC 1097  
 Db 4 CCAGGGUUCACCCC 17  
 RESULT 558  
 ACDS5368  
 ID ACD55368 standard; RNA; 17 BP.  
 AC ACD55368;  
 XX  
 XX 23-SEP-2003 (first entry)  
 XX  
 XX HBV amberzyme substrate sequence #28.  
 XX  
 XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;  
 KW RNA stability; RNA expression; RNA synthesis; antisense;  
 KW enzymatic nucleic acid; hammerhead ribozyme; DNzyme; inozyme; zinzyme;  
 KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;  
 KW HBV reverse transcriptase; Enhancer I region; viral replication;  
 KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;  
 KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;  
 KW virucide; antiinflammatory; substrate; ss.  
 XX  
 OS Hepatitis B virus.  
 XX  
 XX WO200281494-A1.  
 XX

```

PD XX 17-OCT-2002.
XX KW
XX KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;
XX PF amberyne; G-cleaver ribozyme; decoy molecule; aptamer;
XX PR HBV reverse transcriptase; Enhancer I region; viral replication;
XX PR degenerative; disease state; HBV infection; HCV infection; cirrhosis;
XX PR liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
XX PR virucide; antiinflammatory; substrate; ss.
XX OS Hepatitis B virus.
XX PN WO200281494-A1.
XX PD 17-OCT-2002.
XX PF 26-MAR-2002; 2002WO-US009187.
XX PR 26-MAR-2001; 2001US-00817879.
XX PR 08-JUN-2001; 2001US-00877478.
XX PR 08-JUN-2001; 2001US-0296876P.
XX PR 24-OCT-2001; 2001US-0335059P.
XX PR 05-DEC-2001; 2001US-0337055P.
XX PR (RIBO-) RIBOZYME PHARM INC.
XX PA (BLAT/) BLATT L.
XX PA (MACE/) MACEJAK D.
XX PA (MCSW/) MCSWIGGEN J.
XX PA (MORR/) MORRISSEY D.
XX PA (PAVC/) PAVCO P.
XX PA (LEEP/) LEE P.
XX PA (DRAP/) DRAPER K.
XX PA (ROBE/) ROBERTS E.
XX PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
XX PI Draper K, Roberts E;
XX XX WPI; 2003-229207/22.
XX PT Novel compound useful for treating cirrhosis, liver failure,
XX PT hepatocellular carcinoma, or condition associated with hepatitis C virus
XX PT infection.
XX PS Example 1; Page 202; 387pp; English.
XX CC The present invention relates to nucleic acid molecules which modulate
XX CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
XX CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
XX CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
XX CC inozymes, zinzymes, amberyne, and G-cleaver ribozymes. Also disclosed
XX CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
XX CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
XX CC as oligonucleotides that specifically bind the Enhancer I region of HBV
XX CC DNA. The nucleic acids may be used to modulate the expression of HBV
XX CC genes and HBV viral replication. Also disclosed is a method for screening
XX CC compounds and/or potential therapies directed against HBV, and compounds
XX CC that modulate the expression and/or replication of HCV. The compounds and
XX CC methods of the invention are useful for the treatment of degenerative and
XX CC disease states related to HBV and HCV infection, replication and gene
XX CC expression such as cirrhosis, liver failure, and hepatocellular
XX CC carcinoma. The present sequence represents a substrate for one of the HBV
XX CC ribozyme, inozyme, G-cleaver, zinzyme, DNazyme or amberyne sequences
XX CC disclosed in the present invention
XX SQ Sequence 17 BP; 7 A; 4 C; 3 G; 0 T; 3 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 17;
Best Local Similarity 85.7%; Pred. No. 5.3e+02;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1297 CCACAGAGCCTAGA 1310
DB 4 CCACAGAGUCUAGA 17

RESULT 559
ACD51586
ID ACD51586 standard; RNA; 17 BP.
XX AC ACD51586;
XX AC ACD51586;
XX DT 24-SEP-2003 (first entry)
XX DE HBV hammerhead ribozyme substrate sequence #644.
XX KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
XX KW RNA stability; RNA expression; RNA synthesis; antisense;

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KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;
KW amberyne; G-cleaver ribozyme; decoy molecule; aptamer;
KW HBV reverse transcriptase; Enhancer I region; viral replication;
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW virucide; antiinflammatory; substrate; ss.
XX OS Hepatitis B virus.
XX PN WO200281494-A1.
XX PD 17-OCT-2002.
XX PF 26-MAR-2002; 2002WO-US009187.
XX PR 26-MAR-2001; 2001US-00817879.
XX PR 08-JUN-2001; 2001US-00877478.
XX PR 08-JUN-2001; 2001US-0296876P.
XX PR 24-OCT-2001; 2001US-0335059P.
XX PR 05-DEC-2001; 2001US-0337055P.
XX PR (RIBO-) RIBOZYME PHARM INC.
XX PA (BLAT/) BLATT L.
XX PA (MACE/) MACEJAK D.
XX PA (MCSW/) MCSWIGGEN J.
XX PA (MORR/) MORRISSEY D.
XX PA (PAVC/) PAVCO P.
XX PA (LEEP/) LEE P.
XX PA (DRAP/) DRAPER K.
XX PA (ROBE/) ROBERTS E.
XX PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
XX PI Draper K, Roberts E;
XX XX WPI; 2003-229207/22.
XX PT Novel compound useful for treating cirrhosis, liver failure,
XX PT hepatocellular carcinoma, or condition associated with hepatitis C virus
XX PT infection.
XX PS Example 1; Page 148; 387pp; English.
XX CC The present invention relates to nucleic acid molecules which modulate
XX CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
XX CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
XX CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
XX CC inozymes, zinzymes, amberyne, and G-cleaver ribozymes. Also disclosed
XX CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
XX CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
XX CC as oligonucleotides that specifically bind the Enhancer I region of HBV
XX CC DNA. The nucleic acids may be used to modulate the expression of HBV
XX CC genes and HBV viral replication. Also disclosed is a method for screening
XX CC compounds and/or potential therapies directed against HBV, and compounds
XX CC that modulate the expression and/or replication of HCV. The compounds and
XX CC methods of the invention are useful for the treatment of degenerative and
XX CC disease states related to HBV and HCV infection, replication and gene
XX CC expression such as cirrhosis, liver failure, and hepatocellular
XX CC carcinoma. The present sequence represents a substrate for one of the HBV
XX CC ribozyme, inozyme, G-cleaver, zinzyme, DNazyme or amberyne sequences
XX CC disclosed in the present invention
XX SQ Sequence 17 BP; 2 A; 8 C; 4 G; 0 T; 3 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 17;
Best Local Similarity 78.6%; Pred. No. 5.3e+02;
Matches 11; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1084 CCAGCCTCACCCC 1097
DB 2 CCAGGCUACACCCC 15

RESULT 560

```

```
ACD51587
ID ACD51587 standard; RNA; 17 BP.
XX
AC ACD51587;
XX
DT 24-SEP-2003 (first entry)
XX
DE HBV hammerhead ribozyme substrate sequence #645.
XX
XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW RNA stability; RNA expression; RNA synthesis; antisense;
KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;
KW amberyne; G-cleaver ribozyme; decoy molecule; aptamer;
KW HBV reverse transcriptase; Enhancer I region; viral replication;
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW liver failure; hepatocellular carcinoma; hepatotropic; cyrostatic;
KW virucide; antiinflammatory; substrate; ss.
XX
XX Hepatitis B virus.
OS
XX WO200281494-A1.
PN
XX 17-OCT-2002.
PD
XX
XX 26-MAR-2002; 2002WO-US009187.
PF
XX
XX 26-MAR-2001; 2001US-00817879.
PR
XX 08-JUN-2001; 2001US-00877478.
PR
XX 08-JUN-2001; 2001US-0296876P.
PR
XX 24-OCT-2001; 2001US-0335059P.
PR
XX 05-DEC-2001; 2001US-0337055P.
PR
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX (BLAT/) BLATT L.
PA
XX (MACE/) MACEJAK D.
PA (MCSW/) MCSWIGGEN J.
PA (MORR/) MORRISSEY D.
PA (PVC/) PAVCO P.
PA (LEP/) LEE P.
PA (DRAP/) DRAPER K.
PA (ROBE/) ROBERTS E.
XX
XX Blatt L, Macejak D, Mcswiggen J, Morrissey J, Pavco P, Lee P;
PI Draper K, Roberts E;
PI
XX WPI; 2003-229207/22.
DR
XX
XX Novel compound useful for treating cirrhosis, liver failure,
PT hepatocellular carcinoma, or condition associated with hepatitis C virus
PT infection.
PT
XX Example 1; Page 148; 387pp; English.
PS
XX The present invention relates to nucleic acid molecules which modulate
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
CC inozymes, zinzymes, amberyne, and G-cleaver ribozymes. Also disclosed
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC as oligonucleotides that specifically bind the Enhancer I region of HBV
CC DNA. The nucleic acids may be used to modulate the expression of HBV
CC genes and HBV viral replication. Also disclosed is a method for screening
CC compounds and/or potential therapies directed against HBV, and compounds
CC that modulate the expression and/or replication of HCV. The compounds and
CC methods of the invention are useful for the treatment of degenerative and
CC disease states related to HBV and HCV infection, replication and gene
CC expression such as cirrhosis, liver failure, and hepatocellular
CC carcinoma. The present sequence represents a substrate for one of the HBV
CC ribozyme, inozyme, G-cleaver, zinzyme, DNazyme or amberyne sequences
CC disclosed in the present invention
XX
XX Sequence 17 BP; 2 A; 9 C; 3 G; 0 T; 3 U; 0 Other;
SQ
```

```
Query Match 0.6%; Score 12.4; DB 1; Length 17;
Best Local Similarity 78.6%; Pred. No. 5.3e+02;
Matches 11; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1084 CCAGGCTTCACCCC 1097
DB 1 CCAGGGUUCACCCC 14

RESULT 561
ACCG6032
ID ACCG6032 standard; DNA; 17 BP.
XX
AC ACCG6032;
XX
DT 01-JUL-2003 (first entry)
XX
DE Murine oligonucleotide associated with tumour suppression, SEQ ID 3279.
XX
KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;
KW tumour suppression; tumour reversion; apoptosis; virus resistance;
KW viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizophrenia; ss.
XX
OS Mus musculus.
XX
XX WO2003025176-A2.
PN
XX 27-MAR-2003.
PD
XX
XX 17-SEP-2002; 2002WO-IB004210.
PF
XX
XX 17-SEP-2001; 2001FR-00011979.
PR
XX (MOLE-) MOLECULAR ENGINES LAB.
PA
XX Telerman A, Amson R, Tuijnder M;
PI
XX WPI; 2003-333167/31.
DR
XX
XX New isolated nucleic acid, useful for treating viral diseases associated
PT with tumours and cell degeneration, also related polypeptides, antibodies
PT and transfected cells.
PT
XX Disclosure; Page 414; 738pp; French.
XX
XX The present invention relates to murine oligonucleotides (ACCG2754-
CC ACC6806), which are associated with tumour suppression, tumour
CC reversion, apoptosis and virus resistance. The oligonucleotides are
CC useful as (1) as probes and primers for detecting, identifying,
CC quantifying and/or amplifying nucleic acid, e.g. as one component of a
CC gene chip; in vitro as (anti)sense reagents; and (2) for production of
CC recombinant polypeptides. The oligonucleotides are useful for preparation
CC of pharmaceuticals for prevention and/or treatment of viral diseases that
CC are characterised by development of tumours or cell degeneration,
CC specifically cancer but also Alzheimer's disease and schizophrenia
XX
XX Sequence 17 BP; 4 A; 7 C; 2 G; 4 T; 0 U; 0 Other;
SQ
```

```
Query Match 0.6%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 5.3e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1121 CCAGTTCACCTTC 1134
DB 4 CCAGTACCACTTC 17

RESULT 562
ACCG7296
ID ACCG7296 standard; DNA; 17 BP.
XX
XX
```

AC ACC67296;  
 XX 01-JUL-2003 (first entry)  
 XX Murine oligonucleotide associated with tumour suppression, SEQ ID 4543.  
 DE  
 XX  
 XX Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;  
 KW tumour suppression; tumour reversion; apoptosis; virus resistance;  
 KW viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;  
 KW schizophrenia; ss.  
 OS  
 XX Mus musculus.  
 XX  
 XX WO2003025176-A2.  
 XX  
 XX 27-MAR-2003.  
 XX  
 XX 17-SEP-2002; 2002WO-IB004210.  
 XX  
 XX 17-SEP-2001; 2001FR-00011979.  
 XX  
 XX (MOLE-) MOLECULAR ENGINES LAB.  
 XX  
 XX Telerman A, Amson R, Tuijnder M;  
 XX WPI; 2003-333167/31.  
 XX  
 XX New isolated nucleic acid, useful for treating viral diseases associated  
 PT with tumors and cell degeneration, also related polypeptides, antibodies  
 PT and transfected cells.  
 XX  
 XX Disclosure; Page 562; 738pp; French.  
 XX  
 XX The present invention relates to murine oligonucleotides (ACC62754-  
 CC ACC68806), which are associated with tumour suppression, tumour  
 CC reversion, apoptosis and virus resistance. The oligonucleotides are  
 CC useful as (1) as probes and primers for detecting, identifying,  
 CC quantifying and/or amplifying nucleic acid, e.g. as one component of a  
 CC gene chip; in vitro as (anti)sense reagents; and (2) for production of a  
 CC recombinant polypeptides. The oligonucleotides are useful for preparation  
 CC of pharmaceuticals for prevention and/or treatment of viral diseases that  
 CC are characterised by development of tumours or cell degeneration,  
 CC specifically cancer but also Alzheimer's disease and schizophrenia  
 XX  
 XX Sequence 17 BP; 1 A; 3 C; 3 G; 10 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.6%; Score 12.4; DB 1; Length 17;  
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 911 TCTTTGGTCTTGC 924  
 DB 3 TCTTTGGTCTTGC 16  
 RESULT 563  
 ADB42368  
 ID ADB42368 standard; DNA; 17 BP.  
 XX  
 XX ADB42368;  
 XX  
 XX 18-DEC-2003 (revised)  
 DT 04-DEC-2003 (first entry)  
 XX  
 XX Tumour suppression/reversion associated nucleotide #2691.  
 DE  
 XX  
 XX cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;  
 KW primer; probe; tumour suppression; tumour reversion; apoptosis;  
 KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;  
 KW diagnosis.  
 XX  
 XX Homo sapiens.  
 OS  
 XX WO2003040369-A2.  
 PN  
 XX 15-MAY-2003.

PN WO2003040369-A2.  
 XX  
 XX 15-MAY-2003.  
 XX  
 XX 17-SEP-2002; 2002WO-IB004219.  
 XX  
 XX 17-SEP-2001; 2001FR-00011981.  
 XX  
 XX (MOLE-) MOLECULAR ENGINES LAB.  
 XX  
 XX Telerman A, Amson R, Tuijnder M;  
 XX WPI; 2003-441574/41.  
 XX  
 XX New nucleic acid encoding human prostate membrane-specific antigen,  
 PT useful e.g. for treatment of tumors and viral infection, also related  
 PT polypeptide and antibodies.  
 XX  
 XX Disclosure; Page 346; 771pp; French.  
 XX  
 XX The invention relates to the isolation of 6327 nucleotide sequences,  
 CC fragments of at least 15 consecutive nucleotides of these nucleotides, a  
 CC sequence having at least 80% identity, after optimal alignment, with the  
 CC nucleotides, a sequence that hybridizes under stringent conditions with  
 CC the nucleotides, or the complement, or corresponding RNA, of the  
 CC nucleotides. The nucleotides are used as probes or primers for detecting,  
 CC identifying, quantifying and/or amplifying nucleic acids, as in vitro  
 CC sense and antisense sequences, of nucleotides involved in tumour  
 CC suppression or reversion, apoptosis and or viral resistance, to produce  
 CC recombinant polypeptides, and to prepare transgenic animals, as  
 CC experimental models. The nucleotides (also vectors containing them and  
 CC cells containing the vectors), the encoded polypeptides and antibodies  
 CC (Ab) against the polypeptide are useful for prevention and/or treatment  
 CC of viral infections or diseases characterized by development of tumours  
 CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).  
 CC Analysis of the expression of the nucleotides can be used for diagnosis  
 CC and/or prognosis of these diseases. The nucleotides and polypeptides can  
 CC also be used to screen for their specific interactive molecules,  
 CC potentially useful for treating diseases associated with abnormal  
 CC expression of the nucleotides.  
 XX  
 XX Sequence 17 BP; 3 A; 9 C; 1 G; 4 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.6%; Score 12.4; DB 1; Length 17;  
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 930 ATCCCTCTCTCTCA 943  
 DB 2 ATCCCTCTCTCTCA 15  
 RESULT 564  
 ADB43841/c  
 ID ADB43841 standard; DNA; 17 BP.  
 XX  
 XX ADB43841;  
 XX  
 XX 18-DEC-2003 (revised)  
 DT 04-DEC-2003 (first entry)  
 XX  
 XX Tumour suppression/reversion associated nucleotide #4164.  
 DE  
 XX  
 XX cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;  
 KW primer; probe; tumour suppression; tumour reversion; apoptosis;  
 KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;  
 KW diagnosis.  
 XX  
 XX Homo sapiens.  
 OS  
 XX WO2003040369-A2.  
 PN  
 XX 15-MAY-2003.



```

XX PF 17-SEP-2002; 2002WO-IB004219.
XX PR 17-SEP-2001; 2001FR-00011981.
XX PA (MOLE-) MOLECULAR ENGINES LAB.
XX PI Telerman A, Amson R, Tuijnder M;
XX PS WPI; 2003-441574/41.
XX PT New nucleic acid encoding human prostate membrane-specific antigen,
XX PT useful e.g. for treatment of tumors and viral infection, also related
XX PS polypeptide and antibodies.
XX PS Disclosure; Page 518; 771pp; French.
XX CC The invention relates to the isolation of 6327 nucleotide sequences,
XX CC fragments of at least 15 consecutive nucleotides of these nucleotides, a
XX CC sequence having at least 80% identity, after optimal alignment, with the
XX CC nucleotides, a sequence that hybridizes under stringent conditions with
XX CC the nucleotides, or the complement, or corresponding RNA, of the
XX CC nucleotides. The nucleotides are used as probes or primers for detecting,
XX CC identifying, quantifying and/or amplifying nucleic acids, as in vitro
XX CC sense and antisense sequences, of nucleotides involved in tumour
XX CC suppression or reversion, apoptosis and or viral resistance, to produce
XX CC recombinant polypeptides, and to prepare transgenic animals, as
XX CC experimental models. The nucleotides (also vectors containing them and
XX CC cells containing the vectors), the encoded polypeptides and antibodies
XX CC (Ab) against the polypeptide are useful for prevention and/or treatment
XX CC of viral infections or diseases characterized by development of tumours
XX CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
XX CC Analysis of the expression of the nucleotides can be used for diagnosis
XX CC and/or prognosis of these diseases. The nucleotides and polypeptides can
XX CC also be used to screen for their specific interactive molecules,
XX CC potentially useful for treating diseases associated with abnormal
XX CC expression of the nucleotides.
XX SQ Sequence 17 BP; 4 A; 4 C; 5 G; 4 T; 0 U; 0 Other;
      Query Match 0.6%; Score 12.4; DB 1; Length 17;
      Best Local Similarity 92.9%; Pred. No. 5.3e+02;
      Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1099 ACCCTGGGCTTCAG 1112
Db 17 AACCTGGGCTTCAG 4

RESULT 565
ADB40322
ID ADB40322 standard; DNA; 17 BP.
XX AC ADB40322;
XX DT 18-DEC-2003 (revised)
XX DT 04-DEC-2003 (first entry)
XX DE Tumour suppression/reversion associated nucleotide #645.
XX KW diagnosis.
XX OS Homo sapiens.
XX OS WO2003040369-A2.
XX PN 15-MAY-2003.
XX PD 17-SEP-2002; 2002WO-IB004219.
XX PF 17-SEP-2001; 2001FR-00011981.
XX PR (MOLE-) MOLECULAR ENGINES LAB.
XX PA Telerman A, Amson R, Tuijnder M;

XX PF 17-SEP-2002; 2002WO-IB004219.
XX PR 17-SEP-2001; 2001FR-00011981.
XX PA (MOLE-) MOLECULAR ENGINES LAB.
XX PI Telerman A, Amson R, Tuijnder M;
XX PS WPI; 2003-441574/41.
XX PT New nucleic acid encoding human prostate membrane-specific antigen,
XX PT useful e.g. for treatment of tumors and viral infection, also related
XX PS polypeptide and antibodies.
XX PS Disclosure; Page 107; 771pp; French.
XX CC The invention relates to the isolation of 6327 nucleotide sequences,
XX CC fragments of at least 15 consecutive nucleotides of these nucleotides, a
XX CC sequence having at least 80% identity, after optimal alignment, with the
XX CC nucleotides, a sequence that hybridizes under stringent conditions with
XX CC the nucleotides, or the complement, or corresponding RNA, of the
XX CC nucleotides. The nucleotides are used as probes or primers for detecting,
XX CC identifying, quantifying and/or amplifying nucleic acids, as in vitro
XX CC sense and antisense sequences, of nucleotides involved in tumour
XX CC suppression or reversion, apoptosis and or viral resistance, to produce
XX CC recombinant polypeptides, and to prepare transgenic animals, as
XX CC experimental models. The nucleotides (also vectors containing them and
XX CC cells containing the vectors), the encoded polypeptides and antibodies
XX CC (Ab) against the polypeptide are useful for prevention and/or treatment
XX CC of viral infections or diseases characterized by development of tumours
XX CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
XX CC Analysis of the expression of the nucleotides can be used for diagnosis
XX CC and/or prognosis of these diseases. The nucleotides and polypeptides can
XX CC also be used to screen for their specific interactive molecules,
XX CC potentially useful for treating diseases associated with abnormal
XX CC expression of the nucleotides.
XX SQ Sequence 17 BP; 2 A; 4 C; 3 G; 8 T; 0 U; 0 Other;
      Query Match 0.6%; Score 12.4; DB 1; Length 17;
      Best Local Similarity 92.9%; Pred. No. 5.3e+02;
      Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 903 GGTCATTTTCTTGG 916
Db 1 GATCATTTTCTTGG 14

RESULT 566
ADB41142/c
ID ADB41142 standard; DNA; 17 BP.
XX AC ADB41142;
XX DT 18-DEC-2003 (revised)
XX DT 04-DEC-2003 (first entry)
XX DE Tumour suppression/reversion associated nucleotide #1465.
XX KW cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
XX KW primer; probe; tumour suppression; tumour reversion; apoptosis;
XX KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
XX KW diagnosis.
XX OS Homo sapiens.
XX OS WO2003040369-A2.
XX PN 15-MAY-2003.
XX PD 17-SEP-2002; 2002WO-IB004219.
XX PF 17-SEP-2001; 2001FR-00011981.
XX PR (MOLE-) MOLECULAR ENGINES LAB.
XX PA Telerman A, Amson R, Tuijnder M;

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DR WPI; 2003-441574/41.
XX
PT New nucleic acid encoding human prostate membrane-specific antigen,
PT useful e.g. for treatment of tumors and viral infection, also related
PT polypeptide and antibodies.
XX
PS Disclosure; Page 203; 771pp; French.
XX
CC The invention relates to the isolation of 6327 nucleotide sequences,
CC fragments of at least 15 consecutive nucleotides of these nucleotides, a
CC sequence having at least 80% identity, after optimal alignment, with the
CC nucleotides, a sequence that hybridizes under stringent conditions with
CC the nucleotides, or the complement, or corresponding RNA, of the
CC nucleotides. The nucleotides are used as probes or primers for detecting,
CC identifying, quantifying and/or amplifying nucleic acids, as in vitro
CC sense and antisense sequences, of nucleotides involved in tumour
CC suppression or reversion, apoptosis and or viral resistance, to produce
CC recombinant polypeptides, and to prepare transgenic animals, as
CC experimental models. The nucleotides (also vectors containing them and
CC cells containing the vectors), the encoded polypeptides and antibodies
CC (Ab) against the polypeptide are useful for prevention and/or treatment
CC of viral infections or diseases characterized by development of tumours
CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
CC Analysis of the expression of the nucleotides can be used for diagnosis
CC and/or prognosis of these diseases. The nucleotides and polypeptides can
CC also be used to screen for their specific interactive molecules,
CC potentially useful for treating diseases associated with abnormal
CC expression of the nucleotides.
XX
SQ Sequence 17 BP; 3 A; 5 C; 4 G; 5 T; 0 U; 0 Other;
XX
Query Match 0.6%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 5.3e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 971 GGAAGTCCAGTC 984
DB 14 GGAAGTCCAGATC 1
XX
RESULT 567
ADB42329/c
ID ADB42329 standard; DNA; 17 BP.
XX
AC ADB42329;
XX
DT 18-DEC-2003 (revised)
DT 04-DEC-2003 (first entry)
XX
DE Tumour suppression/reversion associated nucleotide #2652.
XX
KW cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
KW primer; probe; tumour suppression; tumour reversion; apoptosis;
KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
KW diagnosis.
XX
OS Homo sapiens.
XX
PN WO2003040369-A2.
XX
PD 15-MAY-2003.
XX
PF 17-SEP-2002; 2002WO-IB004219.
XX
PR 17-SEP-2001; 2001FR-00011981.
XX
PA (MOLE-) MOLECULAR ENGINES LAB.
XX
PI Telerman A, Amson R, Tuijnder M;
XX
DR WPI; 2003-441574/41.
XX
PT New nucleic acid encoding human prostate membrane-specific antigen,
XX useful e.g. for treatment of tumors and viral infection, also related
XX polypeptide and antibodies.
XX
PT useful e.g. for treatment of tumors and viral infection, also related
XX polypeptide and antibodies.
XX
PS Disclosure; Page 342; 771pp; French.
XX
CC The invention relates to the isolation of 6327 nucleotide sequences,
CC fragments of at least 15 consecutive nucleotides of these nucleotides, a
CC sequence having at least 80% identity, after optimal alignment, with the
CC nucleotides, a sequence that hybridizes under stringent conditions with
CC the nucleotides, or the complement, or corresponding RNA, of the
CC nucleotides. The nucleotides are used as probes or primers for detecting,
CC identifying, quantifying and/or amplifying nucleic acids, as in vitro
CC sense and antisense sequences, of nucleotides involved in tumour
CC suppression or reversion, apoptosis and or viral resistance, to produce
CC recombinant polypeptides, and to prepare transgenic animals, as
CC experimental models. The nucleotides (also vectors containing them and
CC cells containing the vectors), the encoded polypeptides and antibodies
CC (Ab) against the polypeptide are useful for prevention and/or treatment
CC of viral infections or diseases characterized by development of tumours
CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
CC Analysis of the expression of the nucleotides can be used for diagnosis
CC and/or prognosis of these diseases. The nucleotides and polypeptides can
CC also be used to screen for their specific interactive molecules,
CC potentially useful for treating diseases associated with abnormal
CC expression of the nucleotides.
XX
SQ Sequence 17 BP; 4 A; 1 C; 9 G; 3 T; 0 U; 0 Other;
XX
Query Match 0.6%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 5.3e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 1258 CCCAACCCCTTCA 1271
DB 16 CCCAACCCCTTGA 3
XX
RESULT 568
ADB40653/c
ID ADB40653 standard; DNA; 17 BP.
XX
AC ADB40653;
XX
DT 18-DEC-2003 (revised)
DT 04-DEC-2003 (first entry)
XX
DE Tumour suppression/reversion associated nucleotide #976.
XX
KW cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
KW primer; probe; tumour suppression; tumour reversion; apoptosis;
KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
KW diagnosis.
XX
OS Homo sapiens.
XX
PN WO2003040369-A2.
XX
PD 15-MAY-2003.
XX
PF 17-SEP-2002; 2002WO-IB004219.
XX
PR 17-SEP-2001; 2001FR-00011981.
XX
PA (MOLE-) MOLECULAR ENGINES LAB.
XX
PI Telerman A, Amson R, Tuijnder M;
XX
DR WPI; 2003-441574/41.
XX
PT New nucleic acid encoding human prostate membrane-specific antigen,
XX useful e.g. for treatment of tumors and viral infection, also related
XX polypeptide and antibodies.
XX
```

PS Disclosure; Page 146; 771pp; French.

XX The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the nucleotides. The nucleotides are used as probes or primers for detecting, identifying, quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and cells containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours or cell degeneration (e.g. Alzheimer's disease or schizophrenia).

CC Analysis of the expression of the nucleotides can be used for diagnosis and/or prognosis of these diseases. The nucleotides and polypeptides can also be used to screen for their specific interactive molecules, CC potentially useful for treating diseases associated with abnormal CC expression of the nucleotides.

XX

XX Sequence 17 BP; 8 A; 3 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 17;  
Best Local Similarity 92.9%; Pred. No. 5.3e+02;  
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 904 GTCATTTCTTTGG 917  
17 GACATTTCTTTGG 4

Db

RESULT 569  
ADC03827/c  
ID ADC03827 standard; DNA; 17 BP.  
XX  
AC ADC03827;  
XX  
XX 18-DEC-2003 (first entry)  
XX  
XX Human Na/H exchanger-like protein 1 gene oligonucleotide #274.  
DE ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein;  
KW NHEP1; passive replacement therapy; vaccine; diagnosis.  
XX  
XX Homo sapiens.  
XX  
XX EP1273660-A2.  
XX  
XX 08-JAN-2003.  
XX  
XX 25-JAN-2002; 2002EP-00001160.  
XX  
XX 30-JAN-2001; 2001WO-US000666.  
PR 23-MAY-2001; 2001US-00864761.  
PR 21-DEC-2001; 2001US-0343331P.  
XX  
XX (ABOM-) ABOMICA INC.  
XX  
XX Gu Y;  
XX  
XX WPI; 2003-302724/30.  
XX  
XX New human sodium-hydrogen exchanger like protein 1 (NHEP1), useful as a passive replacement therapy or as a vaccine for treating or preventing disorders associated with aberrant expression or activity of human NHEP1.  
XX  
XX Example 2; SEQ ID NO 314; 468pp; English.  
XX  
XX The invention relates to a nucleic acid molecule which encodes a Na+/H+

CC exchanger like protein (NHEP1). The NHEP1 nucleic acid molecule, NHEP1 polypeptide, an antibody against the protein or its antigen-binding fragment is useful in therapy. The NHEP1 nucleic acid molecule, NHEP1 polypeptide and an agonist are particularly useful for manufacturing a medicament for treating or preventing a disorder associated with decreased expression or activity of human NHEP1. The antibody or its antigen-binding fragment, and an antagonist, are useful for manufacturing a medicament for treating or preventing a disorder associated with increased expression or activity of human NHEP1. The NHEP1 nucleic acid or protein is useful as passive replacement therapy, as a vaccine, or in diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide spanning the sequence of the human NHEP1 gene (ADC03514).

XX

XX Sequence 17 BP; 5 A; 2 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 17;  
Best Local Similarity 92.9%; Pred. No. 5.3e+02;  
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1122 CAGTTCACCTTCA 1135  
14 CAGTTCACCTTCA 1

Db

RESULT 570  
ADC03824/c  
ID ADC03824 standard; DNA; 17 BP.  
XX  
AC ADC03824;  
XX  
XX 18-DEC-2003 (first entry)  
XX  
XX Human Na/H exchanger-like protein 1 gene oligonucleotide #271.  
DE ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein;  
KW NHEP1; passive replacement therapy; vaccine; diagnosis.  
XX  
XX Homo sapiens.  
XX  
XX EP1273660-A2.  
XX  
XX 08-JAN-2003.  
XX  
XX 25-JAN-2002; 2002EP-00001160.  
XX  
XX 30-JAN-2001; 2001WO-US000666.  
PR 23-MAY-2001; 2001US-00864761.  
PR 21-DEC-2001; 2001US-0343331P.  
XX  
XX (ABOM-) ABOMICA INC.  
XX  
XX Gu Y;  
XX  
XX WPI; 2003-302724/30.  
XX  
XX New human sodium-hydrogen exchanger like protein 1 (NHEP1), useful as a passive replacement therapy or as a vaccine for treating or preventing disorders associated with aberrant expression or activity of human NHEP1.  
XX  
XX Example 2; SEQ ID NO 311; 468pp; English.  
XX  
XX The invention relates to a nucleic acid molecule which encodes a Na+/H+

CC exchanger like protein (NHEP1). The NHEP1 nucleic acid molecule, NHEP1 polypeptide, an antibody against the protein or its antigen-binding fragment is useful in therapy. The NHEP1 nucleic acid molecule, NHEP1 polypeptide and an agonist are particularly useful for manufacturing a medicament for treating or preventing a disorder associated with decreased expression or activity of human NHEP1. The antibody or its antigen-binding fragment, and an antagonist, are useful for manufacturing a medicament for treating or preventing a disorder associated with increased expression or activity of human NHEP1. The NHEP1 nucleic acid or protein is useful as passive replacement therapy, as a vaccine, or in

CC diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide  
 CC spanning the sequence of the human NHEPL1 gene (ADC03514).

SQ Sequence 17 BP; 6 A; 1 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 17;  
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1122 CAGTTCACCTTCA 1135  
 |||||  
 Db 17 CAGTTCACCTTCA 4

RESULT 571  
 ADC03826/c  
 ID ADC03826 standard; DNA; 17 BP.

AC ADC03826;

DT 18-DEC-2003 (first entry)

DE Human Na/H exchanger-like protein 1 gene oligonucleotide #273.

ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein;  
 NHEPL1; passive replacement therapy; vaccine; diagnosis.

OS Homo sapiens.

PN EP1273660-A2.

PD 08-JAN-2003.

PF 25-JAN-2002; 2002EP-00001160.

PR 30-JAN-2001; 2001WO-US000666.

PR 23-MAY-2001; 2001US-00864761.

PR 21-DEC-2001; 2001US-0343331P.

PA (AEOM-) AEOMICA INC.

PI Gu Y;

WPI; 2003-302724/30.

New human sodium-hydrogen exchanger like protein 1 (NHEPL1), useful as a  
 passive replacement therapy or as a vaccine for treating or preventing  
 disorders associated with aberrant expression or activity of human  
 NHEPL1.

Example 2; SEQ ID NO 313; 468pp; English.

The invention relates to a nucleic acid molecule which encodes a Na+/H+  
 exchanger like protein (NHEPL1). The NHEPL1 nucleic acid molecule, NHEPL1  
 polypeptide, an antibody against the protein or its antigen-binding  
 fragment is useful in therapy. The NHEPL1 nucleic acid molecule, NHEPL1  
 polypeptide and an agonist are particularly useful for manufacturing a  
 medicament for treating or preventing a disorder associated with  
 decreased expression or activity of human NHEPL1. The antibody or its  
 antigen-binding fragment, and an antagonist, are useful for manufacturing  
 a medicament for treating or preventing a disorder associated with  
 increased expression or activity of human NHEPL1. The NHEPL1 nucleic acid  
 or protein is useful as passive replacement therapy, as a vaccine, or in  
 diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide  
 spanning the sequence of the human NHEPL1 gene (ADC03514).

Sequence 17 BP; 5 A; 2 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 17;  
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1122 CAGTTCACCTTCA 1135

Db 15 CAGTTCACCTTCA 2

RESULT 572  
 ADC03825/c

ID ADC03825 standard; DNA; 17 BP.

AC ADC03825;

DT 18-DEC-2003 (first entry)

DE Human Na/H exchanger-like protein 1 gene oligonucleotide #272.

ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein;  
 NHEPL1; passive replacement therapy; vaccine; diagnosis.

OS Homo sapiens.

PN EP1273660-A2.

PD 08-JAN-2003.

PF 25-JAN-2002; 2002EP-00001160.

PR 30-JAN-2001; 2001WO-US000666.

PR 23-MAY-2001; 2001US-00864761.

PR 21-DEC-2001; 2001US-0343331P.

PA (AEOM-) AEOMICA INC.

PI Gu Y;

WPI; 2003-302724/30.

New human sodium-hydrogen exchanger like protein 1 (NHEPL1), useful as a  
 passive replacement therapy or as a vaccine for treating or preventing  
 disorders associated with aberrant expression or activity of human  
 NHEPL1.

Example 2; SEQ ID NO 312; 468pp; English.

The invention relates to a nucleic acid molecule which encodes a Na+/H+  
 exchanger like protein (NHEPL1). The NHEPL1 nucleic acid molecule, NHEPL1  
 polypeptide, an antibody against the protein or its antigen-binding  
 fragment is useful in therapy. The NHEPL1 nucleic acid molecule, NHEPL1  
 polypeptide and an agonist are particularly useful for manufacturing a  
 medicament for treating or preventing a disorder associated with  
 decreased expression or activity of human NHEPL1. The antibody or its  
 antigen-binding fragment, and an antagonist, are useful for manufacturing  
 a medicament for treating or preventing a disorder associated with  
 increased expression or activity of human NHEPL1. The NHEPL1 nucleic acid  
 or protein is useful as passive replacement therapy, as a vaccine, or in  
 diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide  
 spanning the sequence of the human NHEPL1 gene (ADC03514).

Sequence 17 BP; 6 A; 1 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 17;  
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1122 CAGTTCACCTTCA 1135

Db 16 CAGTTCACCTTCA 3

RESULT 573  
 ADB45380

ID ADB45380 standard; DNA; 17 BP.

AC ADB45380;

XX

DT 18-DEC-2003 (first entry)  
 XX Tumour suppression/reversion associated nucleotide #5703.  
 DE  
 XX  
 XX cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;  
 KW primer; probe; tumour suppression; tumour reversion; apoptosis;  
 KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;  
 KW diagnosis.  
 KW  
 XX Homo sapiens.  
 OS  
 XX WO2003040369-A2.  
 PN  
 XX  
 XX 15-MAY-2003.  
 PD  
 XX  
 XX 17-SEP-2002; 2002WO-IB004219.  
 PF  
 XX  
 XX 17-SEP-2001; 2001FR-00011981.  
 PR  
 XX  
 XX (MOLE-) MOLECULAR ENGINES LAB.  
 PA  
 XX  
 XX Telerman A, Amson R, Tuijnder M;  
 PI  
 XX  
 XX WPI; 2003-441574/41.  
 DR  
 XX  
 XX New nucleic acid encoding human prostate membrane-specific antigen,  
 PT useful e.g. for treatment of tumors and viral infection, also related  
 PT polypeptide and antibodies.  
 XX  
 XX Disclosure; Page 698; 771pp; French.  
 PS  
 XX  
 XX The invention relates to the isolation of 6327 nucleotide sequences,  
 CC fragments of at least 15 consecutive nucleotides of these nucleotides, a  
 CC sequence having at least 80% identity, after optimal alignment, with the  
 CC nucleotides, a sequence that hybridizes under stringent conditions with  
 CC the nucleotides, or the complement, or corresponding RNA, of the  
 CC nucleotides. The nucleotides are used as probes or primers for detecting,  
 CC identifying, quantifying and/or amplifying nucleic acids, as in vitro  
 CC sense and antisense sequences, of nucleotides involved in tumour  
 CC suppression or reversion, apoptosis and or viral resistance, to produce  
 CC recombinant polypeptides, and to prepare transgenic animals, as  
 CC experimental models. The nucleotides (also vectors containing them and  
 CC cells containing the vectors), the encoded polypeptides and antibodies  
 CC (Ab) against the polypeptide are useful for prevention and/or treatment  
 CC of viral infections or diseases characterized by development of tumours  
 CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).  
 CC Analysis of the expression of the nucleotides can be used for diagnosis  
 CC and/or prognosis of these diseases. The nucleotides and polypeptides can  
 CC also be used to screen for their specific interactive molecules,  
 CC potentially useful for treating diseases associated with abnormal  
 CC expression of the nucleotides.  
 XX  
 XX Sequence 17 BP; 4 A; 3 C; 4 G; 6 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.6%; Score 12.4; DB 1; Length 17;  
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 796 TCTCTGTAAGTACTG 809  
 Db 3 TCTCTGTAAGTACTG 16  
 RESULT 574  
 ADB44348  
 ID ADB44348 standard; DNA; 17 BP.  
 AC  
 XX ADB44348;  
 XX  
 XX 18-DEC-2003 (first entry)  
 DT  
 XX Tumour suppression/reversion associated nucleotide #4671.  
 DE  
 XX  
 KW cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;  
 KW primer; probe; tumour suppression; tumour reversion; apoptosis;  
 KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;  
 KW diagnosis.  
 KW  
 XX Homo sapiens.  
 OS  
 XX WO2003040369-A2.  
 PN  
 XX  
 XX 15-MAY-2003.  
 PD  
 XX  
 XX 17-SEP-2002; 2002WO-IB004219.  
 PF  
 XX  
 XX 17-SEP-2001; 2001FR-00011981.  
 PR  
 XX  
 XX (MOLE-) MOLECULAR ENGINES LAB.  
 PA  
 XX  
 XX Telerman A, Amson R, Tuijnder M;  
 PI  
 XX  
 XX WPI; 2003-441574/41.  
 DR  
 XX  
 XX New nucleic acid encoding human prostate membrane-specific antigen,  
 PT useful e.g. for treatment of tumors and viral infection, also related  
 PT polypeptide and antibodies.  
 XX  
 XX Disclosure; Page 698; 771pp; French.  
 PS  
 XX  
 XX The invention relates to the isolation of 6327 nucleotide sequences,  
 CC fragments of at least 15 consecutive nucleotides of these nucleotides, a  
 CC sequence having at least 80% identity, after optimal alignment, with the  
 CC nucleotides, a sequence that hybridizes under stringent conditions with  
 CC the nucleotides, or the complement, or corresponding RNA, of the  
 CC nucleotides. The nucleotides are used as probes or primers for detecting,  
 CC identifying, quantifying and/or amplifying nucleic acids, as in vitro  
 CC sense and antisense sequences, of nucleotides involved in tumour  
 CC suppression or reversion, apoptosis and or viral resistance, to produce  
 CC recombinant polypeptides, and to prepare transgenic animals, as  
 CC experimental models. The nucleotides (also vectors containing them and  
 CC cells containing the vectors), the encoded polypeptides and antibodies  
 CC (Ab) against the polypeptide are useful for prevention and/or treatment  
 CC of viral infections or diseases characterized by development of tumours  
 CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).  
 CC Analysis of the expression of the nucleotides can be used for diagnosis  
 CC and/or prognosis of these diseases. The nucleotides and polypeptides can  
 CC also be used to screen for their specific interactive molecules,  
 CC potentially useful for treating diseases associated with abnormal  
 CC expression of the nucleotides.  
 XX  
 XX Sequence 17 BP; 4 A; 3 C; 4 G; 6 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.6%; Score 12.4; DB 1; Length 17;  
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 796 TCTCTGTAAGTACTG 809  
 Db 3 TCTCTGTAAGTACTG 16  
 RESULT 575  
 ADC70411  
 ID ADC70411 standard; DNA; 17 BP.  
 AC  
 XX ADC70411;  
 XX  
 XX 18-DEC-2003 (first entry)  
 DT  
 XX  
 XX Primer oligo used for analysing CpG islands in genomic DNA (SeqID 901).  
 DE  
 XX  
 KW PCR; primer; ss; lung cell proliferative disorder; CpG dinucleotide;  
 KW adenocarcinoma; squamous cell carcinoma; cytosolic; probe; PNA-oligomer;  
 KW cytosine methylation state.  
 KW  
 XX

KW cytosolic; antiviral; neuroprotective; nootropic; neuroleptic; ss;  
 KW primer; probe; tumour suppression; tumour reversion; apoptosis;  
 KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;  
 KW diagnosis.  
 KW  
 XX Homo sapiens.  
 OS  
 XX WO2003040369-A2.  
 PN  
 XX  
 XX 15-MAY-2003.  
 PD  
 XX  
 XX 17-SEP-2002; 2002WO-IB004219.  
 PF  
 XX  
 XX 17-SEP-2001; 2001FR-00011981.  
 PR  
 XX  
 XX (MOLE-) MOLECULAR ENGINES LAB.  
 PA  
 XX  
 XX Telerman A, Amson R, Tuijnder M;  
 PI  
 XX  
 XX WPI; 2003-441574/41.  
 DR  
 XX  
 XX New nucleic acid encoding human prostate membrane-specific antigen,  
 PT useful e.g. for treatment of tumors and viral infection, also related  
 PT polypeptide and antibodies.  
 XX  
 XX Disclosure; Page 578; 771pp; French.  
 PS  
 XX  
 XX The invention relates to the isolation of 6327 nucleotide sequences,  
 CC fragments of at least 15 consecutive nucleotides of these nucleotides, a  
 CC sequence having at least 80% identity, after optimal alignment, with the  
 CC nucleotides, a sequence that hybridizes under stringent conditions with  
 CC the nucleotides, or the complement, or corresponding RNA, of the  
 CC nucleotides. The nucleotides are used as probes or primers for detecting,  
 CC identifying, quantifying and/or amplifying nucleic acids, as in vitro  
 CC sense and antisense sequences, of nucleotides involved in tumour  
 CC suppression or reversion, apoptosis and or viral resistance, to produce  
 CC recombinant polypeptides, and to prepare transgenic animals, as  
 CC experimental models. The nucleotides (also vectors containing them and  
 CC cells containing the vectors), the encoded polypeptides and antibodies  
 CC (Ab) against the polypeptide are useful for prevention and/or treatment  
 CC of viral infections or diseases characterized by development of tumours  
 CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).  
 CC Analysis of the expression of the nucleotides can be used for diagnosis  
 CC and/or prognosis of these diseases. The nucleotides and polypeptides can  
 CC also be used to screen for their specific interactive molecules,  
 CC potentially useful for treating diseases associated with abnormal  
 CC expression of the nucleotides.  
 XX  
 XX Sequence 17 BP; 1 A; 2 C; 4 G; 10 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.6%; Score 12.4; DB 1; Length 17;  
 Best Local Similarity 92.9%; Pred. No. 5.3e+02;  
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 911 TCTTTGGTCTTTCG 924  
 Db 3 TCTTTGGTCTTTCG 16  
 RESULT 575  
 ADC70411  
 ID ADC70411 standard; DNA; 17 BP.  
 AC  
 XX ADC70411;  
 XX  
 XX 18-DEC-2003 (first entry)  
 DT  
 XX  
 XX Primer oligo used for analysing CpG islands in genomic DNA (SeqID 901).  
 DE  
 XX  
 KW PCR; primer; ss; lung cell proliferative disorder; CpG dinucleotide;  
 KW adenocarcinoma; squamous cell carcinoma; cytosolic; probe; PNA-oligomer;  
 KW cytosine methylation state.  
 KW  
 XX



PS Example 1; SEQ ID NO 42; 423pp; English.

XX The invention relates to a method of predicting the potential of

CC oligonucleotides to hybridise to target nucleotide sequences. The method

CC is useful for predicting the potential of an oligonucleotide to hybridise

CC to a target nucleotide sequence, e.g. RNA or DNA or a sequence that

CC contains chemically modified nucleotides. The method is also useful for

CC predicting the potential of the oligonucleotides to hybridise to a

CC complementary target nucleotide sequence. The method is useful to predict

CC efficient hybridisation oligonucleotides for each of multiple target

CC sequences therefore very large arrays may be constructed and tested with

CC minimum synthesis of oligonucleotides. The present sequence represents a

CC rabbit beta-globin derived oligonucleotide sequence.

XX Sequence 17 BP; 3 A; 7 C; 1 G; 6 T; 0 U; 0 Other;

SQ Query Match 0.6%; Score 12.4; DB 1; Length 17;

Best Local Similarity 92.9%; Pred. No. 5.3e+02;

Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1125 TTCCACCTTCACCT 1138

Db 2 TTCCACCTTCACCT 15

RESULT 579

ADD80970

ID ADD80970 standard; DNA; 17 BP.

XX AC ADD80970;

DT 29-JAN-2004 (first entry)

XX Rabbit beta-globin fragment derived oligonucleotide #4.

DE ss; oligonucleotide hybridisation potential; efficient hybridisation;

XX KW large array; minimum oligonucleotide synthesis; rabbit; beta-globin.

XX OS Oryctolagus cuniculus.

XX US2003054346-A1.

XX PD 20-MAR-2003.

XX 15-FEB-2001; 2001US-00784674.

XX 10-FEB-1998; 98US-00021701.

XX (SHAN/) SHANNON K W.

XX (WOLB/) WOLBER P K.

XX (DELE/) DELENSTARR G C.

XX (WEBB/) WEBB P G.

XX (KINC/) KINCAID R H.

XX Shannon KW, Wolber PK, Delenstarr GC, Webb PG, Kincaid RH;

XX WPI; 2003-743746/70.

XX Predicting potential of oligonucleotides to hybridize to target

PT nucleotide sequence comprises determining and evaluating for each

PT oligonucleotide a parameter predictive of the oligonucleotides ability to

PT hybridize with target.

XX Example 1; SEQ ID NO 43; 423pp; English.

XX The invention relates to a method of predicting the potential of

CC oligonucleotides to hybridise to target nucleotide sequences. The method

CC is useful for predicting the potential of an oligonucleotide to hybridise

CC to a target nucleotide sequence, e.g. RNA or DNA or a sequence that

CC contains chemically modified nucleotides. The method is also useful for

CC predicting the potential of the oligonucleotides to hybridise to a

CC complementary target nucleotide sequence. The method is useful to predict

CC efficient hybridisation oligonucleotides for each of multiple target

XX Detecting and differentiating cytosine methylation state of genomic DNA,

PT useful for diagnosing, treating prognosticating and/or monitoring lung

PT cell proliferative disorders e.g. adenocarcinoma and squamous cell

PT carcinoma.

XX Claim 15; SEQ ID NO 899; 58pp; English.

XX This invention relates to a novel method for detecting and

CC differentiating between lung cell proliferative disorders associated with

CC at least one gene and/or their regulatory regions. Specifically, it

CC refers to a method comprising contacting a target nucleic acid in a

CC biological sample with at least one reagent, wherein the reagent is able

CC to distinguish between methylated and non-methylated CpG dinucleotides

CC present in the target DNA. As such, it is possible to further

CC differentiate and diagnose medical conditions including adenocarcinoma

CC and squamous cell carcinoma, and their respective adjacent lung tissue.

CC The present invention describes cytosine oligomers and PNA-oligomers

CC that are useful as probes for determining the cytosine methylation state

CC or single nucleotide polymorphisms (SNPs) of the target sequence. This

CC oligonucleotide sequence is a primer oligomer used for the analysis of

CC CpG positions within genomic DNA, used in an exemplification of the

CC invention.

XX Sequence 17 BP; 1 A; 8 C; 1 G; 7 T; 0 U; 0 Other;

SQ Query Match 0.6%; Score 12.4; DB 1; Length 17;

Best Local Similarity 92.9%; Pred. No. 5.3e+02;

Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 898 CCCCTGCTCATTTT 911

Db 4 CCCCTGCTCATTTT 17

RESULT 578

ADD80969

ID ADD80969 standard; DNA; 17 BP.

XX AC ADD80969;

DT 29-JAN-2004 (first entry)

XX Rabbit beta-globin fragment derived oligonucleotide #3.

DE ss; oligonucleotide hybridisation potential; efficient hybridisation;

XX KW large array; minimum oligonucleotide synthesis; rabbit; beta-globin.

XX OS Oryctolagus cuniculus.

XX US2003054346-A1.

XX PD 20-MAR-2003.

XX 15-FEB-2001; 2001US-00784674.

XX 10-FEB-1998; 98US-00021701.

XX (SHAN/) SHANNON K W.

XX (WOLB/) WOLBER P K.

XX (DELE/) DELENSTARR G C.

XX (WEBB/) WEBB P G.

XX (KINC/) KINCAID R H.

XX Shannon KW, Wolber PK, Delenstarr GC, Webb PG, Kincaid RH;

XX WPI; 2003-743746/70.

XX Predicting potential of oligonucleotides to hybridize to target

PT nucleotide sequence comprises determining and evaluating for each

PT oligonucleotide a parameter predictive of the oligonucleotides ability to

PT hybridize with target.

CC sequences therefore very large arrays may be constructed and tested with  
CC minimum synthesis of oligonucleotides. The present sequence represents a  
CC rabbit beta-globin derived oligonucleotide sequence.

XX SQ Sequence 17 BP; 3 A; 7 C; 1 G; 6 T; 0 U; 0 Other;  
Query Match 0.6%; Score 12.4; DB 1; Length 17;  
Best Local Similarity 92.9%; Pred. No. 5.3e+02;  
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1125 TTCCACCTTCACCT 1138  
|||||  
Db 1 TTCCACATTCACCT 14

RESULT 580

ADD80968

ID ADD80968 standard; DNA; 17 BP.

XX AC ADD80968;

XX 29-JAN-2004 (first entry)

XX DE Rabbit beta-globin fragment derived oligonucleotide #2.

XX ss; oligonucleotide hybridisation potential; efficient hybridisation;  
KW large array; minimum oligonucleotide synthesis; rabbit; beta-globin.

XX OS Oryctolagus cuniculus.

XX PN US2003054346-A1.

XX PD 20-MAR-2003.

XX PF 15-FEB-2001; 2001US-00784674.

XX PR 10-FEB-1998; 98US-00021701.

XX (SHAN/) SHANNON K W.

PA (WOLB/) WOLBER P K.

PA (DELE/) DELENSTARR G C.

PA (WEBB/) WEBB P G.

PA (KINC/) KINCAID R H.

XX Shannon KW, Wolber PK, Delenstarr GC, Webb PG, Kincaid RH;

XX WPI; 2003-743746/70.

XX Predicting potential of oligonucleotides to hybridize to target

PT nucleotide sequence comprises determining and evaluating for each

PT oligonucleotide a parameter predictive of the oligonucleotides ability to

PT hybridize with target.

XX Example 1; SEQ ID NO 41; 423pp; English.

XX The invention relates to a method of predicting the potential of  
CC oligonucleotides to hybridize to target nucleotide sequences. The method  
CC is useful for predicting the potential of an oligonucleotide to hybridize  
CC to a target nucleotide sequence, e.g. RNA or DNA or a sequence that  
CC contains chemically modified nucleotides. The method is also useful for  
CC predicting the potential of the oligonucleotides to hybridize to a  
CC complementary target nucleotide sequence. The method is useful to predict  
CC efficient hybridisation oligonucleotides for each of multiple target  
CC sequences therefore very large arrays may be constructed and tested with  
CC minimum synthesis of oligonucleotides. The present sequence represents a  
CC rabbit beta-globin derived oligonucleotide sequence.

XX SQ Sequence 17 BP; 3 A; 7 C; 0 G; 7 T; 0 U; 0 Other;

Query Match

Best Local Similarity 0.6%; Score 12.4; DB 1; Length 17;

Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1125 TTCCACCTTCACCT 1138  
|||||  
Db 3 TTCCACATTCACCT 16

RESULT 581

ADD80967

ID ADD80967 standard; DNA; 17 BP.

XX AC ADD80967;

XX 29-JAN-2004 (first entry)

XX DE Rabbit beta-globin fragment derived oligonucleotide #1.

XX ss; oligonucleotide hybridisation potential; efficient hybridisation;  
KW large array; minimum oligonucleotide synthesis; rabbit; beta-globin.

XX OS Oryctolagus cuniculus.

XX PN US2003054346-A1.

XX PD 20-MAR-2003.

XX PF 15-FEB-2001; 2001US-00784674.

XX PR 10-FEB-1998; 98US-00021701.

XX (SHAN/) SHANNON K W.

PA (WOLB/) WOLBER P K.

PA (DELE/) DELENSTARR G C.

PA (WEBB/) WEBB P G.

PA (KINC/) KINCAID R H.

XX Shannon KW, Wolber PK, Delenstarr GC, Webb PG, Kincaid RH;

XX WPI; 2003-743746/70.

XX Predicting potential of oligonucleotides to hybridize to target

PT nucleotide sequence comprises determining and evaluating for each

PT oligonucleotide a parameter predictive of the oligonucleotides ability to

PT hybridize with target.

XX Example 1; SEQ ID NO 40; 423pp; English.

XX The invention relates to a method of predicting the potential of  
CC oligonucleotides to hybridize to target nucleotide sequences. The method  
CC is useful for predicting the potential of an oligonucleotide to hybridize  
CC to a target nucleotide sequence, e.g. RNA or DNA or a sequence that  
CC contains chemically modified nucleotides. The method is also useful for  
CC predicting the potential of the oligonucleotides to hybridize to a  
CC complementary target nucleotide sequence. The method is useful to predict  
CC efficient hybridisation oligonucleotides for each of multiple target  
CC sequences therefore very large arrays may be constructed and tested with  
CC minimum synthesis of oligonucleotides. The present sequence represents a  
CC rabbit beta-globin derived oligonucleotide sequence.

XX SQ Sequence 17 BP; 3 A; 7 C; 0 G; 7 T; 0 U; 0 Other;

Query Match

Best Local Similarity 0.6%; Score 12.4; DB 1; Length 17;

Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1125 TTCCACCTTCACCT 1138  
|||||  
Db 4 TTCCACATTCACCT 17

RESULT 582

ABK01807

ID ABK01807 standard; RNA; 17 BP.

XX AC ABK01807;



chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),  
 Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob  
 disease, muscular dystrophy, and/or other neurodegenerative disease  
 states which respond to the modulation of NOGO expression. The present  
 sequence is a zizyme molecule of the invention

Sequence 17 BP; 3 A; 2 C; 9 G; 0 T; 3 U; 0 Other;  
 Query Match 0.6%; Score 12.4; DB 1; Length 17;  
 Best Local Similarity 71.4%; Pred. No. 5.3e+02;  
 Matches 10; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

1506 GCTGGAGCTGCTGG 1519  
 ||:||||:||||  
 2 GCTGGAGCTGCTGG 15

RESULT 583  
 ADE43557  
 ID ADE43557 standard; DNA; 18 BP.  
 XX AC ADE43557;  
 XX DT 29-JAN-2004 (first entry)  
 XX DE Human IDE sequencing primer, SEQ ID 162.  
 XX KW Neurodegenerative disease; uPA; SNCG; IDE; KNSL1; LIPA; TNFRSF6;  
 KW Alzheimer's disease; neuroprotective; nontropic; gene therapy;  
 KW Chromosome 10; PCR; primer; ss.  
 XX OS Homo sapiens.  
 XX PN WO2003054143-A2.  
 XX PD 03-JUL-2003.  
 XX PF 25-OCT-2002; 2002WO-US034679.  
 XX PR 25-OCT-2001; 2001US-0339525P.  
 PR 08-NOV-2001; 2001US-0336929P.  
 PR 08-NOV-2001; 2001US-0338010P.  
 PR 09-NOV-2001; 2001US-0338363P.  
 PR 04-DEC-2001; 2001US-0337052P.  
 PR 28-MAR-2002; 2002US-0368919P.  
 XX (NEUR-) NEUROGENETICS INC.  
 PA (GEO) GEN HOSPITAL CORP.  
 XX Becker KD, Velicelebi G, Elliott KJ, Wang X, Tanzi RE, Bertram L;  
 PI Saunders AJ, Mullin KM, Sampson AJ, Blacker DL;  
 DR WPI; 2003-559131/52.  
 XX Determining a predisposition for or the occurrence of neurodegenerative  
 disease, e.g. Alzheimer's disease by detecting in a target nucleic acid  
 the presence or absence of an allelic variant of one or more polymorphic  
 regions.  
 XX Example 3; Page 276; 848pp; English.  
 XX The present invention relates to a method (M1) for determining a  
 predisposition for or the occurrence of neurodegenerative disease in a  
 subject. The method comprises detecting in a target nucleic acid obtained  
 from the subject the presence or absence of an allelic variant of one or  
 more polymorphic regions of one or more genes selected from uPA  
 (urokinase plasminogen activator), SNCG (gamma-synuclein), IDE (insulin-  
 degrading enzyme), KNSL1 (Kinesin-like protein 1), LIPA (lysosomal acid  
 lipase), and TNFRSF6 (Tumour Necrosis Factor Receptor-SF6), where the  
 presence of at least one of the allelic variant of one or more  
 polymorphic regions is indicative of a predisposition for or the  
 occurrence of neurodegenerative disease. The genes are all located on  
 chromosome 10. M1 is useful for determining a predisposition for or the

Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;  
 cerebroprotective; nontropic; neuroprotective; antiparkinsonian;  
 musclar; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;  
 DNzyme; inozyme; G-cleaver; amberyne; zinzyme; lymphoma; leukaemia;  
 B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;  
 human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;  
 MCL; immunocytoma; IMC; immune thrombocytopenia; stroke; dementia;  
 inflammatory arthropathy; central nervous system injury;  
 cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;  
 chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;  
 Parkinson's disease; ataxia; Huntington's disease;  
 Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.

Homo sapiens.  
 Synthetic.  
 WO200159103-A2.  
 16-AUG-2001.  
 09-FEB-2001; 2001WO-US004273.  
 11-FEB-2000; 2000US-0181797P.  
 28-FEB-2000; 2000US-0185516P.  
 06-MAR-2000; 2000US-0187128P.  
 (RIBO-) RIBOZYME PHARM INC.  
 (BLAT/) BLATT L.  
 (MCSW/) MCSWIGGEN J.  
 (CHOW/) CHOWRIRA B M.  
 Blatt L, Mcswiggen J, Chowrira BM;  
 WPI; 2001-607195/69.  
 Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense  
 constructs, which down regulate expression of a CD20 gene or neurite  
 growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and  
 central nervous system injury.  
 Claim 88; Page 98; 200pp; English.  
 The invention relates to a nucleic acid molecule which down regulates  
 expression of a CD20 gene and a nucleic acid molecule which down  
 regulates expression of a neurite growth inhibitor gene (NOGO). The  
 nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a  
 DNzyme) an inozyme (an endolytic nucleic acid cleaving an RNA motif) or  
 possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or  
 an amberyne (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA  
 with a YGI motif). The CD20-targeting nucleic acid is used to cleave RNA  
 of CD20 in the presence of a divalent cation that is preferably Mg<sup>2+</sup>.  
 Furthermore, it may be contacted with a cell to reduce CD20 activity of  
 the cell and treat a patient having a condition associated with the level  
 of CD20. The treatment may further comprise the use of one or more  
 therapies. In particular, the CD20 targeting nucleic acid may be used to  
 treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-  
 Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic  
 leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell  
 lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,  
 immune thrombocytopenia, and inflammatory arthropathy. The NOGO-  
 targeting nucleic acid is used to cleave RNA of the NOGO gene in the  
 presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, the  
 nucleic acid may be contacted with a cell to reduce NOGO activity of the  
 cell and treat a patient having a condition associated with the level of  
 NOGO. The treatment may further comprise the use of one or more  
 therapies. In particular, the NOGO-targeting nucleic acid may be used to  
 treat central nervous system (CNS) injury and cerebrovascular accident  
 (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),

CC occurrence of, and for treating neurodegenerative disease, particularly  
 CC Alzheimer's disease. The present sequence is a PCR primer, which was used  
 CC in the method of the invention.

XX Sequence 18 BP; 4 A; 7 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.4; DB 1; Length 18;

Best Local Similarity 92.9%; Pred. No. 6.2e+02;

Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1081 ACTCCAGGCTTCAC 1094

DB 2 ACTCCAGGCTTC 15

RESULT 584

ADA50406/c

ID ADA50406 standard; DNA; 17 BP.

XX AC

ADA50406;

XX 20-NOV-2003 (first entry)

XX Thermus scotoductus nucleic acid polymerase PCR primer SEQ ID NO:30.

DE nucleic acid polymerase; enzyme; Thermus scotoductus; DNA polymerase;

XX salt tolerance; thermostability; PCR primer; ss.

XX Synthetic.

OS Thermus scotoductus.

XX WO2003066804-A2.

XX 14-AUG-2003.

XX 13-SEP-2002; 2002WO-US029102.

XX 14-SEP-2001; 2001US-0322218P.

PR 30-NOV-2001; 2001US-0334489P.

XX (APPL-) APPLERA CORP.

PA (BOLC/) BOLCHAKOVA E V.

PA (ROZZ/) ROZZELLE J E.

XX Bolchakova EV, Rozzelle JE;

XX WPI; 2003-663590/62.

XX New nucleic acid encoding a Thermus scotoductus strain X-1, ATCC Deposit

PT No. 27978 nucleic acid polymerase, useful for producing nucleic acid

PT polymerases having e.g., improved sequence discrimination or better salt

PT tolerance.

XX Example 1; Page 79; 179pp; English.

XX The present invention describes isolated nucleic acids encoding nucleic

CC acid polymerases from Thermus scotoductus. Also described: (1) an

CC isolated nucleic acid (I) encoding a nucleic acid polymerase from Thermus

CC scotoductus strain X-1, ATCC Deposit No. 27978; (2) an isolated DNA

CC polymerase polypeptide from Thermus scotoductus strain X-1, ATCC Deposit

CC No. 27978; (3) an isolated nucleic acid (II) comprising any of a set of

CC 12 nucleic acid sequences (S1, see ADA50425 to ADA50436) which encodes a

CC nucleic acid polymerase; (4) an isolated nucleic acid (III) encoding a

CC nucleic acid polymerase comprising any of a set of 16 amino acid

CC sequences (S2, see ADA50389 to ADA50404); (5) isolated nucleic acid

CC polymerases comprising any of amino acid sequences S2; (6) vectors

CC comprising (I), (II), or (III), and especially expression vectors in

CC which the nucleic acid polymerase gene is operably linked to a promoter;

CC (7) a host cell comprising an isolated nucleic acid molecule encoding a

CC nucleic acid polymerase from Thermus scotoductus strain X-1, ATCC Deposit

CC No. 27978; (8) a host cell comprising (I) or (II); (9) a kit comprising a

CC container containing a nucleic acid polymerase comprising any of amino

CC acid sequences S2; (10) preparing (MI) a nucleic acid polymerase

CC comprising any of amino acid sequences S2 by incubating a host cell  
 CC comprising an encoding nucleic acid under conditions sufficient for RNA  
 CC transcription and translation; (11) a nucleic acid polymerase prepared by  
 CC M1; (12) synthesising DNA (M2) comprising contacting a polypeptide  
 CC comprising any of amino acid sequences S2 with a DNA under conditions  
 CC sufficient to permit DNA polymerisation; (13) a method (M3) for  
 CC thermocyclic amplification of nucleic acid; and (14) a method (M4) of  
 CC primer extension. The nucleic acid is useful for producing nucleic acid  
 CC polymerases having improved sequence discrimination, better salt  
 CC tolerance or varying degrees of thermostability with applications e.g. in  
 CC PCR and DNA sequencing. The present sequence represents a PCR primer for  
 CC Thermus scotoductus nucleic acid polymerase, which is used in an example  
 CC from the present invention.

XX Sequence 17 BP; 3 A; 11 C; 1 G; 2 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;

Best Local Similarity 82.4%; Pred. No. 5.9e+02;

Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 301 CTGGAGCTGTGTGGTGGG 317

DB 17 CTGGAGGTGGAGTGGG 1

RESULT 585

ACC79937/c

ID ACC79937 standard; DNA; 17 BP.

XX AC

ACC79937;

XX 09-SEP-2003 (first entry)

XX Thermus oshimai nucleic acid polymerase PCR primer SEQ ID NO:30.

XX Thermus oshimai; nucleic acid polymerase; enzyme; DNA sequencing;

XX amplification; reverse transcription; RNA amplification;

XX primer extension; PCR primer; ss.

XX Thermus oshimai.

XX Synthetic.

XX WO2003048310-A2.

XX 12-JUN-2003.

XX 22-NOV-2002; 2002WO-US037764.

XX 30-NOV-2001; 2001US-0334798P.

XX (APPL-) APPLERA CORP.

XX Bolchakova E, Rozzelle J;

XX WPI; 2003-505286/47.

XX New nucleic acid, useful for DNA sequencing or amplification, reverse

XX transcription, RNA amplification or primer extension reactions.

XX Example 1; Page 50; 64pp; English.

XX The present invention describes a nucleic acid (I) encoding a nucleic  
 CC acid polymerase or a derivative nucleic acid polymerase with a mutation  
 CC that decreases 5'-3' exonuclease activity or that reduces discrimination  
 CC against dideoxynucleotide triphosphates. Also described: (1) a vector  
 CC comprising the nucleic acid (I); (2) a host cell comprising the nucleic  
 CC acid (I); (3) a nucleic acid polymerase or its derivative; (4) a kit  
 CC comprising a container containing the nucleic acid polymerase of (3); (5)  
 CC making the nucleic acid polymerase of (3); (6) synthesising a DNA; (7)  
 CC thermocyclic amplification of nucleic acid; and (8) primer extending a  
 CC DNA. The nucleic acid (I) is useful for DNA sequencing or amplification,  
 CC reverse transcription, RNA amplification or primer extension reactions.  
 CC The present sequence represents a PCR primer for Thermus oshimai nucleic

KW	Initiation of translation sequence; antisense therapy; phosphorothioate
KW	nuclease resistance; ss.
XX	Synthetic.
OS	Key
XX	Location/Qualifiers
XX	modified_base 1
PH	/tag= a
FT	/mod_base= OTHER
FT	/note= "5'-deoxy-5'-(diphenylimidazolin-2-yl) thymidine"
FT	
XX	
XX	WO9202531-A.
PN	
XX	20-FEB-1992.
PD	
XX	27-JUL-1990; 90US-00558663.
XX	
PF	27-JUL-1990; 90US-00558663.
PR	
XX	(ISIS-) ISIS PHARMA INC.
XX	
PA	Cook PD, Guinasso CJ;
XX	
PI	WPI; 1992-080013/10.
PT	
XX	New poly-amine conjugated oligo-nucleotide analogues - target TAT region
XX	of HIV and portions of Herpes and papilloma genome(s).
XX	Example 3; Page 17; 26pp; English.
PS	
XX	A phosphorothioate oligonucleotide able to hybridise to Papilloma virus
CC	initiation of translation sequence was synthesised. The 5' thymidine
CC	derivative was conjugated with a polyamine, pref. tris(aminobutyl)amine.
CC	The resulting oligonucleotide analogue has enhanced cellular uptake and
CC	is less susceptible to nuclease activity than standard oligonucleotides.
CC	It can be used in anti-sense therapy. See AAQ21836-Q21842
XX	
XX	Sequence 17 BP; 2 A; 8 C; 0 G; 7 T; 0 U; 0 Other;
SQ	
	Query Match 0.6%; Score 12.2; DB 1; Length 17;
	Best Local Similarity 82.4%; Pred. No. 5.9e+02;
	Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps
OY	929 TATCCCTCCCTTCATT 945
DB	1 TCTCCATCTCTTCACT 17
RESULT 588	
AAQ57302	
ID	AAQ57302 standard; mRNA; 17 BP.
XX	
AC	AAQ57302;
XX	
DT	25-MAR-2003 (revised)
DT	26-JUL-1994 (first entry)
XX	
DE	Enzymatic RNA molecule c-myb mRNA target sequence.
XX	
KW	Specific; cleavage; target RNA; protein; prophylaxis; expression;
KW	inhibitor; inhibition; ribozyme; treatment; prevention; psoriasis;
KW	asthma; inflammatory diseases; restenosis; cardiovascular condition;
KW	hypertension; arthritis; ss.
XX	
OS	Synthetic.
XX	
PN	WO9402595-A1.
XX	
PD	03-FEB-1994.
XX	
PF	02-JUL-1993; 93WO-US006316.
XX	
PR	17-JUL-1992; 92US-00916763.

```

PR 07-DEC-1992; 92US-00987132.
PR 07-DEC-1992; 92US-00989848.
PR 07-DEC-1992; 92US-00989849.
PR 19-JAN-1993; 93US-00008895.
XX (RIBO-) RIBOZYME PHARM INC.
PA Sullivan SM, Draper KG;
XX WPI; 1994-048853/06.
DR Enzymatic RNA molecules which cleave mRNA - used to treat or prevent
PT inflammatory, arthritic, stenotic or cardiovascular diseases or
PT conditions.
XX Claim 3; Page 20; 65pp; English.
PS This is a c-myb mRNA target sequence (nucleotide no. 2695) of an
CC enzymatic RNA molecule (ribozyme) which cleaves mRNA associated with the
CC development or maintenance of a restenotic condition. The concn. of the
CC ribozyme necessary to effect a therapeutic treatment is lower than that
CC of an antisense oligonucleotide and the specificity of action is higher.
CC (Updated on 25-MAR-2003 to correct PN field.)
XX
XX Sequence 17 BP; 2 A; 4 C; 4 G; 7 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 910 TTCCTTGGCTTTCCT 926
DB 1 TGCTATGGCTTAGCCT 17
RESULT 589
AAQ62032
ID AAQ62032 standard; DNA; 17 BP.
XX
XX AC AAQ62032;
XX
XX 25-MAR-2003 (revised)
DT 17-NOV-1994 (first entry)
XX
XX Mutant Ki-ras codon 12 antisense phosphorothioate oligo ref. 6949.
XX
XX Antisense; phosphorothioate; H-ras; translation initiation codon;
KW codon-12 point mutation; activated; inhibition; ras-luciferase; activity;
KW detection; modulation; inhibition; expression; oncogene; proliferation;
KW Ki-ras; cancer cell; ss.
XX
XX Synthetic.
OS
XX
XX Key Location/Qualifiers
FH misc_difference 1..17
FT /tag= a
FT /note= "Phosphorothioate linkages"
XX
XX WO9408003-A1.
XX
XX 14-APR-1994.
XX
XX 01-OCT-1993; 93WO-US009346.
XX
XX 05-OCT-1992; 92US-00958134.
PR 21-JAN-1993; 93US-00007996.
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX
XX Monia BP, Freier SM, Ecker DJ;
XX
XX WPI; 1994-135570/16.
XX

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PT New oligo:nucleotides hybridisable with H-ras or Ki-ras gene nucleic acid
PT - in normal or mutated form, for detecting or modulating gene expression,
PT specifically inhibiting proliferation of cancer cells.
XX
XX Disclosure; Page 36; 104pp; English.
XX
XX The sequences given in AAQ62025-38 are antisense phosphorothioate
CC oligonucleotides which are targeted to various regions of Ki-ras
CC oncogene. These oligonucleotides gave significant and reproducible
CC inhibition of the level of Ki-ras mRNA. These oligonucleotides may be
CC used for detecting and modulating, esp. inhibiting, expression of the Ki-
CC ras gene, esp. for inhibiting proliferation of cancer cells, and other
CC conditions associated with Ki-ras oncogene activation. Activated (mutant)
CC Ki-ras can be detected from its differential affinity for particular
CC oligos. (Updated on 25-MAR-2003 to correct PN field.)
XX
XX Sequence 17 BP; 4 A; 9 C; 2 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1131 CTTCCCTCCAGCTCCA 1147
DB 1 CTACGCCACAGCTCCA 17
RESULT 590
AAT01734
ID AAT01734 standard; DNA; 17 BP.
XX
XX AC AAT01734;
XX
XX 17-DEC-1995 (first entry)
XX
XX Peptide nucleic acid targeting HPV genome.
DE
XX
XX Peptide nucleic acid; PNA; cytomegalovirus; CMV; papillomavirus;
KW antiviral; diagnostic; ss.
XX
XX Synthetic.
OS
XX
XX Key Location/Qualifiers
FH misc_feature 1..17
FT /tag= a
FT /note= "at least one (and preferably all) of the backbone
FT subunits are composed of amide units, so that the
FT oligomer consists of the nucleobases attached covalently
FT to a polyamide backbone"
XX
XX WO9504748-A1.
XX
XX 16-FEB-1995.
XX
XX 09-AUG-1994; 94WO-US009039.
XX
XX 09-AUG-1993; 93US-00104438.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Anderson KP, Crooke ST, Mirabelli CK, Ecker DJ, Cowse LM;
XX
XX WPI; 1995-090841/12.
XX
XX New peptide nucleic acid oligomers hybridisable to cytomegalovirus or
PT papilloma:virus - are stable antisense molecules with high affinity for
PT single stranded DNA, used for treating infections.
XX
XX Claim 10; Page 52; 65pp; English.
XX
XX New oligomers are claimed which (A) have at least one peptide nucleic
CC acid (PNA) subunit and (B) have a sequence hybridisable to AUG region, 5'
CC untranslated region, intron/exon (I/E) junction or coding sequence of

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CC cytomegalovirus gene selected from DNA polymerase, IE1 and IE2, or  
 CC hybridisable to the E, B2, E4, E5, E6, E7, L1 or L2 reading frames of a  
 CC papillomavirus. The PNAs can be used to target RNA and single stranded  
 CC DNA (ssDNA) to produce antisense-type gene regulation motifs. Hence  
 CC they may be used therapeutically for modulating cytomegalovirus and  
 CC papillomavirus processes and also as diagnostics (e.g., as probes for  
 CC specific mRNAs). PNA oligomers have high affinity for complementary  
 CC single stranded DNA. They are also able to form triple helices in which a  
 CC first PNA strand binds with RNA or ssDNA and a second PNA strand binds  
 CC with the resulting double helix or with the first PNA strand. The PNAs  
 CC possess no significant charge and are water soluble, which facilitates  
 CC cellular uptake. Further, since they contain amides of non-biological  
 CC amino acids, they are biostable and resistant to enzymatic degradation by  
 CC proteases. The present sequence targets a portion of the papillomavirus  
 CC genome

XX  
 SQ Sequence 17 BP; 2 A; 8 C; 0 G; 7 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;  
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;  
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 929 TATCCCTCTCTCTCTT 945  
 |||||  
 Db 1 TCTCCATCCTCTTCACT 17

RESULT 591  
 AAQ79851  
 ID AAQ79851 standard; DNA; 17 BP.  
 AC AAQ79851;  
 XX  
 DT 25-MAR-2003 (revised)  
 DT 04-SEP-1995 (first entry)  
 XX  
 DE K-ras modulating sequence, targetted to codon 12 (WT).  
 KW Peptide nucleic acid; PNA; ligand; peptide backbone; human; H-ras; K-ras;  
 KW expression; ras gene; mutation; tumour; cancer; ss.  
 XX  
 OS Synthetic.

Key Location/Qualifiers  
 modified\_base 1..17  
 /tag= a  
 /note= "Each base is attached to a N-acetyl (2-amino-ethyl)Gly residue through the N-acetyl group"

XX  
 PN WO9428720-A1.  
 XX  
 PD 22-DEC-1994.  
 XX  
 PF 10-JUN-1994; 94WO-US006620.  
 XX  
 PR 11-JUN-1993; 93US-00076234.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Lima W, Monia B, Freier S, Becker D;  
 XX  
 PS WPI; 1995-035955/05.

XX  
 PT New peptide nucleic acid oligomers for ras oncogene modulation -  
 PT including specific inhibition of the activated gene, for diagnosis and  
 PT treatment esp. of tumours.

XX  
 PS Claim 1; Page 133; 148pp; English.  
 XX  
 CC The sequences given in AAQ79822-57 represent peptide nucleic acids (PNA)  
 CC that bind to complementary ssDNA and RNA strands through their  
 CC oligonucleotide ligands which are linked to a peptide backbone. These  
 CC sequences are directed to the human H-ras and K-ras genes and they

CC modulate the expression of the ras gene in cells or tissues and  
 CC specifically modulate the expression of the activated ras in cells or  
 CC tissues suspected of harbouring a mutated gene. These sequences are  
 CC designed to hybridise with the mRNA from the H-ras and K-ras genes which  
 CC interfere with the normal role of mRNA causing a loss of function in the  
 CC cell. These sequences are used in the treatment of tumours. (Updated on  
 CC 25-MAR-2003 to correct EN field.)

XX  
 SQ Sequence 17 BP; 4 A; 9 C; 2 G; 2 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;  
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;  
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1131 CTTGACCTCCAGCTCCA 1147  
 |||||  
 Db 1 CTACGCCACCACTCCA 17

RESULT 592  
 AAT43101  
 ID AAT43101 standard; DNA; 17 BP.  
 XX  
 AC AAT43101;  
 XX  
 DT 05-SEP-1997 (first entry)  
 XX  
 DE Antisense RA-beta2-primer to amplify beta2-adrenergic receptor gene.  
 XX  
 KW Immortalised cell line; pre-adipocyte; viral oncogene; lipolysis; marker;  
 KW thermogenesis; diabetes; obesity; cell culture; differentiation; mature;  
 KW medium; insulin; dexamethasone; primer; PCR; polymerase chain reaction;  
 KW amplification; adrenergic receptor; ss.  
 XX  
 OS Synthetic.

XX  
 PN WO9634100-A1.  
 XX  
 PD 31-OCT-1996.  
 XX  
 PF 25-APR-1996; 96WO-FR000634.  
 XX  
 PR 25-APR-1995; 95FR-00004922.  
 XX  
 PA (CNRS) CNRS CENT NAT RECH SCI.

XX Strosberg AD, Zilberfarb V;  
 XX  
 XX WPI; 1996-497632/49.

XX  
 PT Immortalised pre-adipocytes contg viral oncogene fragment - useful for  
 PT identifying cpds that regulate lipolysis and thermogenesis, as lipolytic  
 PT agents and models for studying adipocyte processes.  
 XX  
 PS Example 1; Page 15; 52pp; French.  
 XX  
 CC The invention relates to new immortalised cell lines derived from pre-  
 CC adipocytes containing an immortalising fragment of a viral oncogene. The  
 CC immortalised adipocytes are used to identify substances able to regulate  
 CC lipolysis and/or thermogenesis (potential therapeutic agents for treating  
 CC diabetes and obesity). The cell lines have the advantage that they can be  
 CC maintained in long term culture (contrast primary cultures of adipocytes)  
 CC without loss of characteristic markers or ability to differentiate. The  
 CC immortalised pre-adipocytes differentiate into mature adipocytes when  
 CC placed in a medium containing insulin and dexamethasone. The primers  
 CC AAT43098-19 are used to amplify marker genes to verify differentiation of  
 CC the pre-adipocytes into mature adipocytes. Primers AAT43100-1 were used  
 CC to amplify a 329 bp region of the gene encoding the beta-2 adrenergic  
 CC receptor, a specific marker for mature adipocytes

XX  
 SQ Sequence 17 BP; 2 A; 10 C; 1 G; 4 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;

```

Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1134 CACCTCCAGCTCCACCT 1150
Db 1 CCCATCTGCTCCACCT 17

RESULT 593
AAT12444/C
ID AAT12444 standard; DNA; 17 BP.
XX AC AAT12444;
XX DT 17-SEP-1996 (first entry)
XX DE Antiviral phosphorothioate oligonucleotide #27.
XX KW Antiviral; phosphorothioate; mRNA 4; mRNA 5; herpes simplex virus 1; HSV;
XX KW viral infection; HIV; varicella zoster virus; VZV; therapy; ss.
XX OS Synthetic.
XX FH Key Location/Qualifiers
FT modified_base 1..17
FT FT /*tag= a
FT FT /note= "phosphorothioate oligonucleotides"
XX PN WO9603500-A1.
XX XX
XX PD 08-FEB-1996.
XX XX
XX PF 25-JUL-1995; 95WO-JP001472.
XX XX
XX PR 26-JUL-1994; 94JP-00173862.
XX PR 01-NOV-1994; 94JP-00268603.
XX XX
XX PA (LTTL-) LTT INST CO LTD.
XX PI (KAKE) KAKEN PHARM CO LTD.
XX XX
XX PI Shoji Y, Shimada J, Mizushima Y, Iwatani W, Tamura N;
XX DR WPI; 1996-117045/12.
XX XX
XX PT Antiviral phosphorothioate oligonucleotide(s) - active against e.g.
XX PT herpes simplex virus 1, HIV and varicella zoster virus.
XX XX
XX PS Claim 6; Page 150; 163pp; Japanese.
XX CC AAT12435-T12454 represent phosphorothioate oligonucleotides with
XX CC antiviral activity. These sequences, and the phosphorothioate
XX CC oligonucleotides represented by AAT12418-T12434 (which are complementary
XX CC to regions of the mRNA 4 or 5 of herpes simplex virus 1 (HSV)), are
XX CC effective in the prevention and treatment of viral infection. The
XX CC sequences are especially effective against infection by HSV, HIV or
XX CC varicella zoster virus (VZV)
XX XX
XX SQ Sequence 17 BP; 0 A; 2 C; 15 G; 0 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1238 CCTCTCGCTCCGACCC 1254
Db 17 CCCCCGCCCCCCCCC 1

RESULT 594
AAT93618
ID AAT93618 standard; DNA; 17 BP.
XX XX
XX AC AAT93618;

Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1173 CTTTCGGCTCCCGCA 1189
Db 1 CTGCGCGCTCCCGCA 17

RESULT 595
AAX74663
ID AAX74663 standard; RNA; 17 BP.
XX AC AAX74663;
XX DT 28-JUL-1999 (first entry)
XX DE Mouse flt-1 VEGF receptor hammerhead ribozyme substrate #191.
XX KW Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
XX KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
XX KW tumor angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
XX KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
XX KW foetal liver kinase 1; ss.
XX XX
XX OS Mus sp.
XX PN WO9715662-A2.

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XX 25-MAR-2003 (revised)
DT 27-APR-1998 (first entry)
XX XX
XX Primer 4 (reverse) used in mycobacteria species-specific diagnosis.
XX Tuberculosis; mycobacteria; infection; diagnosis; Mycobacterium bovis;
XX BCG; Mycobacterium africanum; Mycobacterium microti; PCR; primer; ss.
XX OS Synthetic.
XX OS Mycobacterium tuberculosis.
XX PN WO9741252-A2.
XX XX
XX PD 06-NOV-1997.
XX PF 18-APR-1997; 97WO-EF001973.
XX XX
XX PR 29-APR-1996; 96DE-01017184.
XX XX
XX PA (GBFB) GBF GES BIOTECH FORSCHUNG GMBH.
XX PI Singh M, Henisch C, Espitia C, Moreno C;
XX DR WPI; 1997-549750/50.
XX XX
XX PT New DNA and related proteins or RNA derived from M. tuberculosis - used
XX PT for diagnosis of mycobacterial infections, monitoring vaccination and
XX PT development of anti-mycobacterial agents.
XX XX
XX Example 1.4; Page 19; 55pp; English.
XX CC This oligonucleotide, designated PRIMER 4 (reverse), is specific for a
XX CC 2253 bp Mycobacterium tuberculosis chromosomal DNA region (see AAT93611).
XX CC It was designed for use with PRIMER 3 (see AAT93617) to amplify a 377 bp
XX CC region of DNA specifically from M. tuberculosis complex bacteria. No
XX CC amplification product is obtained from other bacteria. Thus, the primers
XX CC of the 377 bp region are useful for the rapid discrimination of M.
XX CC tuberculosis complex (M. tuberculosis, Mycobacterium bovis, BCG,
XX CC Mycobacterium africanum and Mycobacterium microti) from other
XX CC mycobacteria. (Updated on 25-MAR-2003 to correct PR field.)
XX SQ Sequence 17 BP; 1 A; 8 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1173 CTTTCGGCTCCCGCA 1189
Db 1 CTGCGCGCTCCCGCA 17

RESULT 595
AAX74663
ID AAX74663 standard; RNA; 17 BP.
XX AC AAX74663;
XX DT 28-JUL-1999 (first entry)
XX DE Mouse flt-1 VEGF receptor hammerhead ribozyme substrate #191.
XX KW Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
XX KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
XX KW tumor angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
XX KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
XX KW foetal liver kinase 1; ss.
XX XX
XX OS Mus sp.
XX PN WO9715662-A2.

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PD 01-MAY-1997.
XX
XX 25-OCT-1996; 96WO-US017480.
XX
XX 26-OCT-1995; 95US-0005974P.
PR 11-JAN-1996; 96US-00584040.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA (CHIR ) CHIRON CORP.
XX
XX Pavco P, Meswigen J, Stinchcomb D, Escobedo J;
PI
XX WPI; 1997-259017/23.
XX
XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT rheumatoid arthritis, etc., in a human patient.
XX
XX Claim 4; Page 160; 218pp; English.
XX
XX The present invention describes nucleic acid molecules which modulate the
CC synthesis, expression and/or stability of a mRNA encoding 1 or more
CC receptors of vascular endothelial growth factor (VEGF). A patient
CC (preferably human) having a condition associated with the level of the
CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC treated by administering the nucleic acid molecule or the expression
CC vector to the patient. AAX67275 to AAX75752 represent specific examples
CC of nucleic acid molecules from the present invention
XX
XX Sequence 17 BP; 3 A; 9 C; 2 G; 0 T; 3 U; 0 Other;
SQ
Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 70.6%; Pred. No. 5.9e-02;
Matches 12; Conservative 2; Mismatches 3; Indels 0; Gaps 0;
QY 1239 CCTGCGCTCCGACCCCA 1255
DB 1 CCUCGCUCCAGGCCCA 17
RESULT 596
AAX73174
ID AAX73174 standard; RNA; 17 BP.
XX
XX AAX73174;
AC
XX 28-JUL-1999 (first entry)
DT
XX Mouse flk-1 VEGF receptor hammerhead ribozyme substrate #607.
DE
XX Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW foetal liver kinase 1; ss.
XX
XX Mus sp.
OS
XX WO9715662-A2.
PN
XX 01-MAY-1997.
XX
XX 25-OCT-1996; 96WO-US017480.
XX
XX 26-OCT-1995; 95US-0005974P.
PR 11-JAN-1996; 96US-00584040.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA (CHIR ) CHIRON CORP.
XX
XX Pavco P, Meswigen J, Stinchcomb D, Escobedo J;
PI

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XX
XX WPI; 1997-259017/23.
XX
XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT rheumatoid arthritis, etc., in a human patient.
XX
XX Claim 4; Page 142; 218pp; English.
XX
XX The present invention describes nucleic acid molecules which modulate the
CC synthesis, expression and/or stability of a mRNA encoding 1 or more
CC receptors of vascular endothelial growth factor (VEGF). A patient
CC (preferably human) having a condition associated with the level of the
CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC treated by administering the nucleic acid molecule or the expression
CC vector to the patient. AAX67275 to AAX75752 represent specific examples
CC of nucleic acid molecules from the present invention
XX
XX Sequence 17 BP; 1 A; 11 C; 3 G; 0 T; 2 U; 0 Other;
SQ
Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 70.6%; Pred. No. 5.9e-02;
Matches 12; Conservative 2; Mismatches 3; Indels 0; Gaps 0;
QY 1083 TCCAGGCTTCACCCCA 1099
DB 1 UCCCGCUCGACCCCA 17
RESULT 597
AAT93446/C
ID AAT93446 standard; DNA; 17 BP.
XX
XX AAT93446;
AC
XX 06-FEB-1998 (first entry)
DT
XX Probe specific for wild-type tumour necrosis factor (TNF) gene.
DE
XX tumour necrosis factor; TNF; cytokine; hepatitis B virus; HBV; TNF-2;
KW virus infection; interferon; therapy; promoter; PCR primer; TNF-alpha;
KW allele; variant; hybridisation; probe; screening; genotyping; ss.
XX
XX Synthetic.
OS
XX Homo sapiens.
PN
XX WO9713875-A1.
XX
XX 17-APR-1997.
XX
XX 14-OCT-1996; 96WO-GB002519.
XX
XX 13-OCT-1995; 95GB-00020993.
PR 13-SEP-1996; 96GB-00019233.
XX
XX (UNLO ) IMPERIAL COLLEGE SCI TECHNOLOGY & MED.
XX
XX Thursz MR, Thomas HC, Hill AV, Mantafounis D;
PI
XX WPI; 1997-235909/21.
XX
XX Assessing cytokine therapy of a persistent virus infection, e.g hepatitis
PT B virus - by determining presence of allele(s) associated with increased
PT therapeutic response, e.g. tumour necrosis factor-2 allele.
XX
XX Example 2; Page 9; 19pp; English.
XX
XX This oligonucleotide probe is used in the confirmatory DNA sequencing of
CC the PCR amplification of the tumour necrosis factor (TNF) gene. This
CC probe is specific for the wild type TNF. A set of primers are used to
CC amplify a 519 bp promoter fragment of the TNF and TNF-2 allele mutated at

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CC position -308. The DNA was isolated from the blood sample of patients  
CC suffering from chronic hepatitis B virus (HBV) infection. This is used in  
CC a novel method for assessing the probable outcome of treating a subject  
CC suffering from a persistent virus infection with a cytokine. The method  
CC determines whether the subject carries one or more alleles (TNF-alpha  
CC allele 1 or 2) associated with therapeutic response when treated with the  
CC cytokine by isolating the DNA from the infected patients followed by PCR  
CC amplification and detecting the TNF alpha promoter alleles by dot blot  
CC hybridisation. The method is used to predict the outcome of persistent  
CC HBV infection in a subject, as well as the outcome of cytokine therapy  
CC (particularly interferon therapy) in patients suffering from chronic  
CC hepatitis infection

XX SQ Sequence 17 BP; 3 A; 2 C; 11 G; 1 T; 0 U; 0 Other;  
Query Match 0.6%; Score 12.2; DB 1; Length 17;  
Best Local Similarity 82.4%; Pred. No. 5.9e+02;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1252 CCCATCCCAACCCCT 1268  
DB 17 CCGTCCCATGCCCT 1

RESULT 598  
AAV97640/c  
ID AAV97640 standard; RNA; 17 BP.  
XX AC AAV97640;  
XX DT 17-MAR-1999 (first entry)  
XX DE Human EGF-R target sequence nucleotide position 3627.  
XX KW Human; epidermal growth factor receptor; EGF-R; target sequence;  
XX KW hammerhead ribozyme; hairpin ribozyme; inhibition; cell proliferation;  
XX KW cancer; genetic drift; detection; mutation; ss.  
XX OS Homo sapiens.  
XX PN WO9833893-A2.  
XX PD 06-AUG-1998.  
XX PR 14-JAN-1998; 98WO-US000730.  
XX PR 31-JAN-1997; 97US-0036476P.  
XX PR 04-DEC-1997; 97US-00985162.  
XX PA (RIBO-) RIBOZYME PHARM INC.  
XX PA (UYAS-) UNIV ASTON.  
XX PI Akhtar S, Fell P, Mcswiggen JA;  
XX WF1; 1998-437449/37.  
XX DE Enzymatic nucleic acids - which cleave RNA derived from an epidermal  
XX PT growth factor receptor, useful for inhibiting cell proliferation and for  
XX PT treating cancers.  
XX PS Claim 5; Page 76; 109pp; English.

CC The present invention describes enzymatic nucleic acid molecules (NAMS)  
CC which specifically cleave RNA derived from an epidermal growth factor  
CC receptor (EGF-R) gene. AAV97221 to AAV98043 and AAV98979 to AAV99090  
CC represent specifically claimed target sequence from human EGF-R. AAV98044  
CC to AAV98866 and AAV98867 to 9878 represent hammerhead ribozymes and  
CC hairpin ribozymes respectively for human EGF-R. The NAMS are useful for  
CC cleaving EGF-R RNA in the treatment of a condition associated with EGF-R  
CC expression levels e.g. to inhibit cell proliferation in the prevention or  
CC treatment of cancers. The NAMS can also be used as diagnostic tools to  
CC examine genetic drift and mutations within diseased cells or to detect  
CC the presence of EGF-R RNA in a cell

XX SQ Sequence 17 BP; 5 A; 6 C; 3 G; 0 T; 3 U; 0 Other;  
Query Match 0.6%; Score 12.2; DB 1; Length 17;  
Best Local Similarity 82.4%; Pred. No. 5.9e+02;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 889 GTGCTGTGCCCCGTGT 905  
DB 17 GTGCTGTGACACAGT 1

RESULT 599  
AAV29726/c  
ID AAV29726 standard; DNA; 17 BP.  
XX AC AAV29726;  
XX DT 03-AUG-1998 (first entry)  
XX DE Probe used to exemplify the method of the invention.  
XX KW Probe; point mutation; fluorescent resonance energy transfer; FRET;  
XX KW fluorescent dye; ss.  
XX OS Synthetic.  
XX FH Location/Qualifiers  
XX modified\_base 1 /\*tag= a  
XX FT /note= "labelled with a Fluorescent dye leading to  
XX FT fluorescent resonance energy transfer"  
XX modified\_base 17 /\*tag= a  
XX FT /note= "labelled with a Fluorescent dye leading to  
XX FT fluorescent resonance energy transfer"  
XX PN JP10127300-A.  
XX PD 19-MAY-1998.  
XX PF 31-OCT-1996; 96JP-00290235.  
XX PR 31-OCT-1996; 96JP-00290235.  
XX PA (HAMM) HAMAMATSU PHOTONICS KK.  
XX WPI; 1998-340670/30.  
XX DE Detection of point mutation and detection of gene abnormality - using  
XX PT probe with base sequence and fluorescent dye.  
XX PS Disclosure; Page 6; 14pp; Japanese.  
XX CC Oligonucleotide probes AAV29709-48 were used to exemplify the method of  
XX CC the invention. This method detects the presence of a point mutation in a  
XX CC specific sequence of a target nucleic acid. The method comprises using a  
XX CC probe which is labelled at 5' and 3' ends with 2 different labels that  
XX CC form fluorescent resonance energy transfer (FRET). The ratio of  
XX CC fluorescence between both fluorescent dyes at the maximum fluorescent  
XX CC absorption wavelength is measured. The fluorescence ratio indicated the  
XX CC ratio of target/probe

XX SQ Sequence 17 BP; 2 A; 2 C; 9 G; 4 T; 0 U; 0 Other;  
Query Match 0.6%; Score 12.2; DB 1; Length 17;  
Best Local Similarity 82.4%; Pred. No. 5.9e+02;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1131 CTTCACTCCAGCTCCA 1147  
DB 17 CTAGCCACCAGCTCCA 1



PCR; primer; amplification; hepatic nuclear factor; HNF; diabetes;  
type II diabetes; HNF1 gene; transcription factor; insulin; ss.

KW  
KW  
XX

RESULT 600

AAV29733 standard; DNA; 17 BP.

ID

AAV29733

AC

XX

XX

DT

03-AUG-1998

(first entry)

XX

DE

Probe used to exemplify the method of the invention.

XX

KW

Probe; point mutation; fluorescent resonance energy transfer; FRET;

fluorescent dye; ss.

KW

XX

OS

Synthetic.

XX

XX

FH

Key

Location/Qualifiers

FT

modified\_base

1

/\*tag= a

/note= "labelled with a Fluorescent dye leading to

fluorescent resonance energy transfer"

FT

modified\_base

17

/\*tag= a

/note= "labelled with a Fluorescent dye leading to

fluorescent resonance energy transfer"

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PCR; primer; amplification; hepatic nuclear factor; HNF; diabetes;  
type II diabetes; HNF1 gene; transcription factor; insulin; ss.

KW  
KW  
XX

RESULT 601

AAV41404 standard; DNA; 17 BP.

ID

AAV41404

AC

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DT

24-SEP-1998

(first entry)

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DE

Nucleotide sequence of 5' PCR primer 3.

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PCR; primer; amplification; hepatic nuclear factor; HNF; diabetes;  
type II diabetes; HNF1 gene; transcription factor; insulin; ss.

KW  
KW  
XX

RESULT 602

AAV41434 standard; DNA; 17 BP.

ID

AAV41434

AC

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DT

24-SEP-1998

(first entry)

XX

DE

Nucleotide sequence of 5' PCR primer 21.

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PCR; primer; amplification; hepatic nuclear factor; HNF; diabetes;  
type II diabetes; HNF1 gene; transcription factor; insulin; ss.

KW  
KW  
XX

RESULT 603

AAV41434 standard; DNA; 17 BP.

ID

AAV41434

AC

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DT

24-SEP-1998

(first entry)

XX

DE

Nucleotide sequence of 5' PCR primer 21.

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XX Glucksmann AM;  
XX WPI; 1998-297866/26.  
XX Treating type II diabetes with agent - useful for, e.g. modulating  
PT expression of hepatic nuclear factor or other diabetes-related gene.  
XX Disclosure; Page 80; 113pp; English.  
XX This is the nucleotide sequence of the PCR primer used for amplification  
CC in the method of the invention, which involves modulating the expression  
CC of hepatic nuclear factor or other diabetes related gene. The method is  
CC used to treat early onset type II diabetes and defects in insulin  
CC secretion. It is based on the discovery that certain mutations in the  
CC HNF1 gene, encoding a transcription factor, are involved in these  
CC conditions  
XX Sequence 17 BP; 2 A; 7 C; 4 G; 4 T; 0 U; 0 Other;  
SQ  
Query Match 0.6%; Score 12.2; DB 1; Length 17;  
Best Local Similarity 82.4%; Pred. NO. 5.9e+02;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
Qy 1216 GCTGACCCCTTCCTGC 1232  
Db 1 GCAGATCCCGCTTCCTGC 17  
RESULT 603  
AAA20940  
ID AAA20940 standard; RNA; 17 BP.  
XX  
XX AAA20940;  
XX  
XX 19-JUN-2000 (first entry)  
XX Integrin alpha 6 subunit substrate sequence SEQ ID NO:4166.  
XX Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;  
XX integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;  
XX hammerhead ribozyme; angiogenic factor; cytosolic; antidiabetic;  
XX ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;  
XX dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;  
XX age related macular degeneration; inflammation; neovascular glaucoma;  
XX myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;  
XX tuberosus sclerosis; pot-wine stain; Sturge Weber syndrome;  
XX Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.  
XX Homo sapiens.  
XX WO950403-A2.  
XX 07-OCT-1999.  
XX 24-MAR-1999; 99WO-US006507.  
XX 27-MAR-1998; 98US-0079678P.  
XX (RIBO-) RIBOZYME PHARM INC.  
XX Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;  
XX WPI; 1999-591315/50.  
XX Novel ribozymes for modulating the synthesis, expression and/or stability  
XX of an mRNA encoding an angiogenic factors.  
XX Claim 55; Page 177; 305pp; English.  
XX The present invention describes enzymatic nucleic acid molecules with RNA  
XX cleaving activity, which specifically cleave RNA encoded by an aryl  
XX hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3

CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to  
CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,  
CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their  
CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to  
CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086  
CC and AAA19155 to AAA19222 represent their corresponding target sequences;  
CC AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme  
CC sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and  
CC AAA21596 to AAA21688 represent their corresponding target sequences;  
CC AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequences  
CC for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to  
CC AAA23422 represent their corresponding target sequences. The ribozymes of  
CC the invention are used for modulating the synthesis, expression and/or  
CC stability of an mRNA encoding angiogenic factor, especially ARNT,  
CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are  
CC especially used to treat cancer, diabetic retinopathy, age related  
CC macular degeneration (ARMD), inflammation, and arthritis, as well as,  
CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,  
CC angiofibroma of tuberosus sclerosis, pot-wine stains, Sturge Weber  
CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,  
CC and other syndromes and diseases related to the levels of ARNT, Tie-2,  
CC integrin subunit alpha-6, or integrin subunit beta-3  
XX Sequence 17 BP; 7 A; 2 C; 5 G; 0 T; 3 U; 0 Other;  
SQ  
Query Match 0.6%; Score 12.2; DB 1; Length 17;  
Best Local Similarity 76.5%; Pred. NO. 5.9e+02;  
Matches 13; Conservative 1; Mismatches 3; Indels 0; Gaps 0;  
Qy 1010 CACCTGAAAAGAGGGG 1026  
Db 1 CAUCUGAUAAGAGAGG 17  
RESULT 604  
AAA22863  
ID AAA22863 standard; RNA; 17 BP.  
XX  
XX AAA22863;  
XX  
XX 19-JUN-2000 (first entry)  
XX Integrin subunit beta 3 substrate sequence SEQ ID NO:6089.  
XX Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;  
XX integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;  
XX hammerhead ribozyme; angiogenic factor; cytosolic; antidiabetic;  
XX ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;  
XX dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;  
XX age related macular degeneration; inflammation; neovascular glaucoma;  
XX myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;  
XX tuberosus sclerosis; pot-wine stain; Sturge Weber syndrome;  
XX Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.  
XX Homo sapiens.  
XX WO950403-A2.  
XX 07-OCT-1999.  
XX 24-MAR-1999; 99WO-US006507.  
XX 27-MAR-1998; 98US-0079678P.  
XX (RIBO-) RIBOZYME PHARM INC.  
XX Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;  
XX WPI; 1999-591315/50.  
XX Novel ribozymes for modulating the synthesis, expression and/or stability  
XX of an mRNA encoding an angiogenic factors.

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PS Claim 54; Page 247; 305pp; English.
XX
CC The present invention describes enzymatic cleavage of RNA molecules with RNA
CC cleaving activity, which specifically cleave RNA encoded by an aryl
CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to
CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their
CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to
CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
CC and AAA19155 to AAA19222 represent their corresponding target sequences;
CC AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme
CC sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
CC AAA21596 to AAA21688 represent their corresponding target sequences;
CC AAA21689 to AAA22475 and AAA23263 to AAA23426, AAA23343 to
CC AAA23422 represent their corresponding target sequences. The ribozymes of
CC the invention are used for modulating the synthesis, expression and/or
CC stability of an mRNA encoding angiogenic factor, especially ARNT,
CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
CC especially used to treat cancer, diabetic retinopathy, age related
CC macular degeneration (ARMD), inflammation, and arthritis, as well as
CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
CC angiofibroma of tuberosus sclerosis, pot-wine stains, Sturge Weber
CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
CC and other syndromes and diseases related to the levels of ARNT, Tie-2,
CC integrin subunit alpha-6, or integrin subunit beta-3
XX
SQ Sequence 17 BP; 6 A; 1 C; 6 G; 0 T; 4 U; 0 Other;
Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 70.6%; Pred. No. 5.9e+02;
Matches 12; Conservative 2; Mismatches 3; Indels 0; Gaps 0;
OY 1022 AGGGGAGCTTGAGGA 1038
DB 1 AAGGGUUCUUGAGGA 17
|||||:|:|:|
1 AAGGGUUCUUGAGGA 17
RESULT 605
AAAL7212
ID AAA17212 standard; RNA; 17 BP.
XX
AC AAAL7212;
XX
XX 19-JUN-2000 (first entry)
XX
DE Aryl hydrocarbon nuclear transport substrate sequence SEQ ID NO:438.
XX
KW Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
KW hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic;
KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
KW dermatologic; RNA cleavage; cancer; diabetic retinopathy; arthritis;
KW age related macular degeneration; inflammation; neovascular glaucoma;
KW myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
KW tuberosus sclerosis; pot-wine stain; Sturge Weber syndrome;
KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
XX
OS Homo sapiens.
XX
XX WO9950403-A2.
XX
XX 07-OCT-1999.
XX
XX 24-MAR-1999; 99WO-US006507.
XX
XX 27-MAR-1998; 98US-0079678P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;
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XX

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DR WPI; 1999-591315/50.
XX
PT Novel ribozymes for modulating the synthesis, expression and/or stability
PT of an mRNA encoding an angiogenic factors.
XX
PS Claim 53; Page 65; 305pp; English.
XX
CC The present invention describes enzymatic cleavage of RNA molecules with RNA
CC cleaving activity, which specifically cleave RNA encoded by an aryl
CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to
CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their
CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to
CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
CC and AAA19155 to AAA19222 represent their corresponding target sequences;
CC AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme
CC sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
CC AAA21596 to AAA21688 represent their corresponding target sequences;
CC AAA21689 to AAA22475 and AAA23263 to AAA23426, AAA23343 to
CC AAA23422 represent their corresponding target sequences. The ribozymes of
CC the invention are used for modulating the synthesis, expression and/or
CC stability of an mRNA encoding angiogenic factor, especially ARNT,
CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
CC especially used to treat cancer, diabetic retinopathy, age related
CC macular degeneration (ARMD), inflammation, and arthritis, as well as
CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
CC angiofibroma of tuberosus sclerosis, pot-wine stains, Sturge Weber
CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
CC and other syndromes and diseases related to the levels of ARNT, Tie-2,
CC integrin subunit alpha-6, or integrin subunit beta-3
XX
SQ Sequence 17 BP; 5 A; 7 C; 3 G; 0 T; 2 U; 0 Other;
Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 76.5%; Pred. No. 5.9e+02;
Matches 13; Conservative 1; Mismatches 3; Indels 0; Gaps 0;
OY 1052 CCCTGGCCCAACCA 1068
DB 1 CCCTGGCCCAACCA 17
|||||:|:|:|
1 CCCTGGCCCAACCA 17
RESULT 606
AAAL8977
ID AAA18977 standard; RNA; 17 BP.
XX
XX AAAL8977;
XX
XX 19-JUN-2000 (first entry)
XX
DE Human TIE-2 substrate sequence SEQ ID NO:2203.
XX
XX
KW Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
KW hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ARMD;
KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
KW dermatologic; RNA cleavage; cancer; diabetic retinopathy; arthritis;
KW age related macular degeneration; inflammation; neovascular glaucoma;
KW myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
KW tuberosus sclerosis; pot-wine stain; Sturge Weber syndrome;
KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
XX
OS Homo sapiens.
XX
XX WO9950403-A2.
XX
XX 07-OCT-1999.
XX
XX 24-MAR-1999; 99WO-US006507.
XX
XX 27-MAR-1998; 98US-0079678P.
XX
XX

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Tue Mar 2 06:29:55 2004

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XX PA (RIBO-) RIBOZYME PHARM INC.
XX PI Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;
XX PR WPI; 1999-591315/50.
XX DR Novel ribozymes for modulating the synthesis, expression and/or stability
XX PT of an mRNA encoding an angiogenic factors.
XX PS Claim 56; Page 129; 305pp; English.
XX CC The present invention describes enzymatic cleave RNA molecules with RNA
XX CC cleaving activity, which specifically cleave RNA encoded by an aryl
XX CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
XX CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to
XX CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
XX CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their
XX CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to
XX CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
XX CC sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
XX CC AAA21596 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequences
XX CC for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
XX CC AAA23422 represent their corresponding target sequences. The ribozymes of
XX CC the invention are used for modulating the synthesis, expression and/or
XX CC stability of an mRNA encoding angiogenic factor, especially ARNT,
XX CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
XX CC especially used to treat cancer, diabetic retinopathy, age related
XX CC macular degeneration (ARMD), inflammation, and arthritis, as well as
XX CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
XX CC angiobroma of tuberosus scleriosis, pot-wine stains, Sturge Weber
XX CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
XX CC and other syndromes and diseases related to the levels of ARNT, Tie-2,
XX CC integrin subunit alpha-6, or integrin subunit beta-3
XX SQ Sequence 17 BP; 3 A; 7 C; 0 G; 0 T; 7 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 41.2%; Pred. No. 5.9e+02;
Matches 7; Conservative 7; Mismatches 3; Indels 0; Gaps 0;

Qy 924 CTTTATCCCTCTCTCT 940
Db 1 CAUUUUAUCCUACCU 17

RESULT 607
AAAI17180/c
XX ID AAA17180 standard; RNA; 17 BP.
XX AC AAA17180;
XX DT 19-JUN-2000 (first entry)
XX DE Aryl hydrocarbon nuclear transport substrate sequence SEQ ID NO:406.
XX KW Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
XX KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
XX KW hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic;
XX KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
XX KW dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;
XX KW age related macular degeneration; inflammation; neovascular glaucoma;
XX KW myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
XX KW tuberosus scleriosis; pot-wine stain; Sturge Weber syndrome;
XX KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
XX OS Homo sapiens.
XX FN WO950403-A2.
XX XX

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PD 07-OCT-1999.
XX PF 24-MAR-1999; 99WO-US006507.
XX PR 27-MAR-1998; 98US-0079678P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PI Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;
XX PR WPI; 1999-591315/50.
XX DR Novel ribozymes for modulating the synthesis, expression and/or stability
XX PT of an mRNA encoding an angiogenic factors.
XX PS Claim 53; Page 63; 305pp; English.
XX CC The present invention describes enzymatic cleave RNA molecules with RNA
XX CC cleaving activity, which specifically cleave RNA encoded by an aryl
XX CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
XX CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to
XX CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
XX CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their
XX CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to
XX CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
XX CC sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
XX CC AAA21596 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequences
XX CC for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
XX CC AAA23422 represent their corresponding target sequences. The ribozymes of
XX CC the invention are used for modulating the synthesis, expression and/or
XX CC stability of an mRNA encoding angiogenic factor, especially ARNT,
XX CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
XX CC especially used to treat cancer, diabetic retinopathy, age related
XX CC macular degeneration (ARMD), inflammation, and arthritis, as well as
XX CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
XX CC angiobroma of tuberosus scleriosis, pot-wine stains, Sturge Weber
XX CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
XX CC and other syndromes and diseases related to the levels of ARNT, Tie-2,
XX CC integrin subunit alpha-6, or integrin subunit beta-3
XX SQ Sequence 17 BP; 5 A; 2 C; 6 G; 0 T; 4 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1126 TCACCTTACCTCCAG 1142
Db 17 TCCACCTTGAATCCAG 1

RESULT 608
AAAI20389/c
XX ID AAA20389 standard; RNA; 17 BP.
XX AC AAA20389;
XX DT 19-JUN-2000 (first entry)
XX DE Integrin alpha 6 subunit substrate sequence SEQ ID NO:3615.
XX KW Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
XX KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
XX KW hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic;
XX KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
XX KW dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;
XX KW age related macular degeneration; inflammation; neovascular glaucoma;
XX KW myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
XX KW tuberosus scleriosis; pot-wine stain; Sturge Weber syndrome;
XX KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.

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XX OS Homo sapiens.
XX PN WO9849349-A1.
XX PD 05-NOV-1998.
XX PF 30-APR-1998; 98WO-US008800.
XX PR 30-APR-1997; 97US-00848840.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Ecker DJ, Cook PD, Monia BP, Freier SM, Sanghvi YS;
XX DR WPI; 1999-024070/02.
XX PT New oligonucleotides for inhibiting ras gene in mutant and activated form
XX PS - also used to detect ras genes.
XX SQ Disclosure; Page 38; 118pp; English.
XX CC AAU84024-37 represent antisense phosphorothioate oligonucleotides
XX CC directed against human Ki-ras. The oligonucleotides are representative of
XX CC the invention, where each oligonucleotide has at least one portion
XX CC comprising at least one CH2-NH-O-CH2, CH2-O-N(CH3)-CH2, CH2-N(CH3)-N(CH3)
XX CC -CH2 or O-N(CH3)-CH2-CH2 linkage alternating with a phosphorothioate or
XX CC phosphodiester linkage. The oligonucleotides are used for the inhibition
XX CC of expression of the ras gene in both the normal and the activated form,
XX CC the latter of which has been implicated in tumour formation. They are
XX CC also used for the detection of the ras gene in cells and tissues and the
XX CC treatment of conditions arising from the activation of the ras gene i.e.
XX CC to inhibit the proliferation of cancer cells
XX SQ Sequence 17 BP; 4 A; 9 C; 2 G; 2 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1131 CTTCACTCCAGCTCCA 1147
DB 1 CTACGCCACCACTCCA 17

RESULT 610
AAU21627
ID AAU21627 standard; DNA; 17 BP.
XX AC AAX21627;
XX DT 14-MAY-1999 (first entry)
XX DE Human Ki-ras specific antisense oligo ISIS #6949.
XX KW Human; N-ras; inhibition; pharmaceutical; modulation; cancer; oncogene;
XX OS diagnostic; therapeutic; tumour; Ki-ras; antisense; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX PN WO9902732-A1.
XX PD 21-JAN-1999.
XX PF 06-JUL-1998; 98WO-US013966.
XX PR 08+JUL-1997; 97US-00889296.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Monia BP, Cowser LM, Manoharan M;
XX DR WPI; 1999-120932/10.

XX OS Homo sapiens.
XX PN WO9950403-A2.
XX PD 07-OCT-1999.
XX PF 24-MAR-1999; 99WO-US006507.
XX PR 27-MAR-1998; 98US-0079678P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PI Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;
XX DR WPI; 1999-591315/50.
XX PT Novel ribozymes for modulating the synthesis, expression and/or stability
XX PS of an mRNA encoding an angiogenic factors.
XX SQ Claim 55; Page 142; 305pp; English.
XX CC The present invention describes enzymatic cleavage of RNA molecules with RNA
XX CC cleaving activity, which specifically cleave RNA encoded by an aryl
XX CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
XX CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAU16775 to
XX CC AAU17167 and AAU17561 to AAU17622 represent ribozyme sequences for ARNT,
XX CC and AAU1768 to AAU17560 and AAU17623 to AAU17684 represent their
XX CC corresponding target sequences; AAU17685 to AAU18385 and AAU19087 to
XX CC AAU19154 represent ribozyme sequences for Tie-2, and AAU18386 to AAU19086
XX CC AAU19155 to AAU19222 represent their corresponding target sequences;
XX CC AAU19223 to AAU20361 and AAU21501 to AAU21595 represent ribozyme
XX CC sequences for integrin alpha 6 subunit, and AAU20362 to AAU21500 and
XX CC AAU21596 to AAU21688 represent their corresponding target sequences;
XX CC AAU21689 to AAU22475 and AAU2263 to AAU23342 represent ribozyme sequence
XX CC for integrin subunit beta 3, and AAU22476 to AAU23262, AAU23343 to
XX CC AAU23422 represent their corresponding target sequences. The ribozymes of
XX CC the invention are used for modulating the synthesis, expression and/or
XX CC stability of an mRNA encoding angiogenic factor, especially ARNT,
XX CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
XX CC especially used to treat cancer, diabetic retinopathy, age related
XX CC macular degeneration (ARMD), inflammation, and arthritis, as well as
XX CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
XX CC angiofibroma of tuberosus sclerosis, pot-wine stains, Sturge Weber
XX CC syndrome, Kippel-Trenaunay-Weber Syndrome, Osler-Weber-Rendu syndrome,
XX CC and other syndromes and diseases related to the levels of ARNT, Tie-2,
XX CC integrin subunit alpha-6, or integrin subunit beta-3
XX SQ Sequence 17 BP; 0 A; 4 C; 8 G; 0 T; 5 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1286 GCGCCCAAGCCACAG 1302
DB 17 GCCCCACAGCAACAG 1

RESULT 609
AAU84031
ID AAU84031 standard; DNA; 17 BP.
XX AC AAU84031;
XX DT 05-MAR-1999 (first entry)
XX DE Antisense oligonucleotide 6949 directed against Ki-ras codon 12.
XX KW Antisense oligonucleotide; phosphorothioate; human H-ras;
XX OS tumour formation; cancer cell proliferation; ss.
XX OS Synthetic.

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XX New oligonucleotide targeting human N-ras nucleic acid - is capable of  
PT inhibiting human N-ras expression, useful for preventing or treating  
PT conditions arising from the activation of a human N-ras oncogene.  
XX  
XX Disclosure; Page 35; 97pp; English.  
XX  
XX The invention relates to oligonucleotides, which target a nucleic acid  
PS encoding human N-ras, and are capable of inhibiting human N-ras  
CC expression. The antisense oligonucleotides form a pharmaceutical  
CC composition, which is useful for modulating the expression of human N-  
CC ras, inhibiting the proliferation of cancer cells, and preventing or  
CC treating conditions arising from the activation of a human N-ras  
CC oncogene. The oligonucleotides are also useful in diagnostics,  
CC therapeutics, and as research reagents and kits. The oligonucleotides  
CC enable the specific modulation of activated human N-ras expression, which  
CC is associated with tumour formation. Sequences AAX21620-633 represent  
CC antisense oligonucleotides complementary to human Ki-ras  
XX  
XX Sequence 17 BP; 4 A; 9 C; 2 G; 2 T; 0 U; 0 Other;  
SQ  
Query Match 0.6%; Score 12.2; DB 1; Length 17;  
Best Local Similarity 82.4%; Pred. No. 5.9e+02;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1131 CTTACCTCCAGCTCCA 1147  
Db 1 CTACGCCACCACTCCA 17  
  
RESULT 611  
AAX56991  
ID AAX56991 standard; DNA; 17 BP.  
AC AAX56991;  
XX  
XX 16-JUL-1999 (first entry)  
DT  
DE Ras gene modulating liposomal entrapped oligonucleotide primer 35.  
XX  
XX Ras gene; modulator; liposome; primer; antisense; anticancer; inhibition;  
KW cell growth inhibitor; treatment; cancer; ras protein; ss.  
XX  
XX Synthetic.  
OS  
XX WO9922772-A1.  
PN  
XX  
XX 14-MAY-1999.  
PD  
XX  
XX 28-OCT-1998; 98WO-US022821.  
PF  
XX  
XX 31-OCT-1997; 97US-00961469.  
PR  
XX  
XX (ISIS-) ISIS PHARM INC.  
PA  
XX  
XX Hardee GE, Geary RS, Levin A, Templin MV, Howard R, Mehta RC;  
PI  
XX WPI; 1999-313181/26.  
XX  
XX Liposome-encapsulated oligonucleotides useful for treating or preventing  
PT cancers associated with ras gene activation.  
XX  
XX Example 1; Page 113; 120pp; English.  
XX  
XX This invention describes novel compositions comprising oligonucleotides  
CC specifically to a target DNA or mRNA which encodes a mutant or wild-type  
CC ras protein. The products of the invention have anticancer activity and  
CC specifically bring about the antisense inhibition of ras genes or mRNA.  
CC The products of the invention are used to modulate expression of a ras  
CC gene in cells, tissue, organs or organisms, particularly to inhibit cell  
CC growth and especially to treat or prevent cancers associated with  
CC activation of a ras gene. Encapsulating the oligonucleotide reduces the

CC rate at which it is cleared from the blood when compared with non-  
CC encapsulated material, and the oligonucleotides become distributed to  
CC practically all parts of the body  
XX  
XX Sequence 17 BP; 4 A; 9 C; 2 G; 2 T; 0 U; 0 Other;  
SQ  
Query Match 0.6%; Score 12.2; DB 1; Length 17;  
Best Local Similarity 82.4%; Pred. No. 5.9e+02;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1131 CTTACCTCCAGCTCCA 1147  
Db 1 CTACGCCACCACTCCA 17  
  
RESULT 612  
AAV92448/C  
ID AAV92448 standard; RNA; 17 BP.  
XX  
XX AAV92448;  
AC  
XX  
XX 18-FEB-1999 (first entry)  
DT  
XX Human A-Raf substrate position 607.  
DE  
XX Human; c-raf; A-raf; B-raf; hammerhead ribozyme; hairpin ribozyme;  
KW target; substrate; catalyst; modulation; expression; Raf gene; delivery;  
KW screening; identification; synthesis; deprotection; purification; cancer;  
KW inflammation; psoriasis; non-hepatic ascites; infection; genetic drift;  
KW restenosis; rheumatoid arthritis; ss.  
XX  
XX Homo sapiens.  
OS  
XX WO9850530-A2.  
PN  
XX  
XX 12-NOV-1998.  
PD  
XX  
XX 05-MAY-1998; 98WO-US009249.  
PF  
XX  
XX 09-MAY-1997; 97US-0046059P.  
PR  
XX 09-JUN-1997; 97US-0049002P.  
PR  
XX 03-JUL-1997; 97US-0051718P.  
PR  
XX 22-AUG-1997; 97US-0056808P.  
PR  
XX 02-OCT-1997; 97US-0061321P.  
PR  
XX 02-OCT-1997; 97US-0061324P.  
PR  
XX 05-NOV-1997; 97US-0064866P.  
PR  
XX 19-DEC-1997; 97US-0068212P.  
PR  
XX  
XX (RIBO-) RIBOZYME PHARM INC.  
PA  
XX  
XX Jarvis T, Matulic-Adamic J, Reynolds M, Kisich K, Bellon L;  
PI Parry T, Beigelman L, Mcswiggen JA, Karpeisky A, Burgin A;  
PI Thompson J, Workman CT, Beaudry A, Sweedler D;  
XX  
XX WPI; 1999-009494/01.  
DR  
XX  
XX Identifying new catalytic nucleic acid that modulates selected processes  
PT - especially ribozymes that cleave Raf RNA for treating cancer,  
PT restenosis, and also new ribozymes and modified nucleoside triphosphates  
PT used as antiviral agents and synthons.  
XX  
XX Claim 177; Page 158; 259pp; English.  
XX  
XX A method has been developed for the identification of a nucleic acid  
CC capable of modulating a process in a biological system. The method  
CC comprises: (a) introducing into the system a random library of nucleic  
CC acid catalysts (NAC) having a substrate binding domain (SBD), comprising  
CC a random sequence, and a catalytic domain (CD); and (b) identifying NAC  
CC in systems where modulation has occurred and/or determining the sequence  
CC of at least part of the SBDs in such systems. Nucleic acid molecules with  
CC endonuclease activity and catalytic activity, from the present invention,  
CC are used to modulate gene expression in plant and mammalian cells and to  
CC cleave target nucleic acid, particularly for treating systemic diseases

CC caused by specific RNA, e.g. cancer, inflammation, psoriasis, non-hepatic  
 CC ascites and infection. They may also be used to detect genetic drift and  
 CC mutations in diseased cells and to determine c-raf RNA. Specifically NACs  
 CC with RNA-cleaving activity that modulate expression of the Raf gene, are  
 CC used to treat cancer, restenosis, psoriasis or rheumatoid arthritis, or  
 CC generally any condition associated with the level of c-raf. Introduction  
 CC of sugar/phosphate modifications increases stability against nuclease and  
 CC activity. AAV90922 to AAV93877 represent NACs that can be used in the  
 CC method, specifically for modulating the expression of a Raf gene  
 XX Sequence 17 BP; 2 A; 6 C; 3 G; 0 T; 6 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;

Best Local Similarity 82.4%; Pred. No. 5.9e+02; Length 17;  
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 1026 GGAGCTTGAAGGAACUA 1042

Db 17 GGCCTTGGGGAACAA 1

RESULT 613

AAV93545

ID AAV93545 standard; RNA; 17 BP.

XX AC AAV93545;

XX DT 18-FEB-1999 (first entry)

XX DE Human B-raf substrate nucleotide position 1605.

XX Human; c-raf; A-raf; B-raf; hammerhead ribozyme; hairpin ribozyme;

XX target; substrate; catalyst; modulation; expression; Raf gene; delivery;

XX screening; identification; synthesis; deprotection; purification; cancer;

XX inflammation; psoriasis; non-hepatic ascites; infection; genetic drift;

XX restenosis; rheumatoid arthritis; ss.

XX Homo sapiens.

XX WO9850530-A2.

XX 12-NOV-1998.

XX 05-MAY-1998; 98WO-US009249.

XX 09-MAY-1997; 97US-0046059P.

XX 09-JUN-1997; 97US-0049002P.

XX 03-JUL-1997; 97US-0051718P.

XX 22-AUG-1997; 97US-0056808P.

XX 02-OCT-1997; 97US-0061321P.

XX 02-OCT-1997; 97US-0061324P.

XX 05-NOV-1997; 97US-0064866P.

XX 19-DEC-1997; 97US-0068212P.

XX (RIBO-) RIBOZYME PHARM INC.

XX Jarvis T, Matulic-Adamic J, Reynolds M, Kisich K, Bellon L;

XX Parry T, Beigelman L, Moswiggen JA, Karpeisky A, Burgin A;

XX Thompson J, Workman C, Beaudry A, Svedler D;

XX WPI; 1999-009494/01.

XX Identifying new catalytic nucleic acid that modulates selected processes

XX - especially ribozymes that cleave Raf RNA for treating cancer,

XX restenosis, and also new ribozymes and modified nucleoside triphosphates

XX used as antiviral agents and synthons.

XX Claim 177; Page 169; 259pp; English.

XX A method has been developed for the identification of a nucleic acid

XX capable of modulating a process in a biological system. The method

XX comprises: (a) introducing into the system a random library of nucleic

XX acid catalysts (NAC) having a substrate binding domain (SBD), comprising

CC a random sequence, and a catalytic domain (CD); and (b) identifying NAC  
 CC in systems where modulation has occurred and/or determining the sequence  
 CC of at least part of the SBDs in such systems. Nucleic acid molecules with  
 CC endonuclease activity and catalytic activity, from the present invention, to  
 CC are used to modulate gene expression in plant and mammalian cells and to  
 CC cleave target nucleic acid, particularly for treating systemic diseases  
 CC caused by specific RNA, e.g. cancer, inflammation, psoriasis, non-hepatic  
 CC ascites and infection. They may also be used to detect genetic drift and  
 CC mutations in diseased cells and to determine c-raf RNA. Specifically NACs  
 CC with RNA-cleaving activity that modulate expression of the Raf gene, are  
 CC used to treat cancer, restenosis, psoriasis or rheumatoid arthritis, or  
 CC generally any condition associated with the level of c-raf. Introduction  
 CC of sugar/phosphate modifications increases stability against nuclease and  
 CC activity. AAV90922 to AAV93877 represent NACs that can be used in the  
 CC method, specifically for modulating the expression of a Raf gene  
 XX Sequence 17 BP; 2 A; 6 C; 3 G; 0 T; 6 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;

Best Local Similarity 47.1%; Pred. No. 5.9e+02; Length 17;

Matches 8; Conservative 6; Mismatches 3; Indels 0; Gaps 0;

OY 933 CCTCCTCTTCATTGGTT 949

Db 1 CCTACTCUUCUAGGGCU 17

RESULT 614

AAAX14709

ID AAX14709 standard; DNA; 17 BP.

XX AC AAX14709;

XX 24-MAR-1999 (first entry)

XX Triple helix third strand of SOD1 gene nucleotides 1205-1218.

XX Triplex formation; DNA detection; triple helix; identification; bacteria;

XX oncogene; virus; ss.

XX Synthetic.

XX Homo sapiens.

XX US5861244-A.

XX 19-JAN-1999.

XX 22-DEC-1993; 93US-00173489.

XX 29-OCT-1992; 92US-00968436.

XX (PROF-) PROFILE DIAGNOSTIC SCI INC.

XX Hepburn AG, Wang C;

XX WPI; 1999-130384/11.

XX Assay of genetic sequences based on triplex formation from double  
 XX stranded analyte - and hybrid of anchor and reporter sequences, with  
 XX reporter released if triplex formation occurs, used e.g. to identify  
 XX bacteria.

XX Disclosure; Col 17-18; 168pp; English.

XX The present sequence represents a polynucleotide that is able to form a  
 XX triple helix with a double stranded sequence. Cytosine bases in the  
 XX present can be replaced with 5-methylcytosine for increased triplex  
 XX stability. The present sequence is used in the assay of the invention,  
 XX where it can be part of the anchor DNA or reporter DNA sequence. The  
 XX assay comprises adding a sample containing double-stranded DNA test  
 XX sequences to an aqueous medium containing at least one complex of anchor  
 XX DNA, attached to a solid support, and reporter DNA, where either a part  
 XX of the anchor DNA or reporter DNA is designed to form a triple-strand





```

SQ Sequence 17 BP; 1 A; 0 C; 11 G; 5 T; 0 U; 0 Other;
Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1139 CCAGCTCCACTATACC 1155
   ||| ||||| |||
Db 17 CCACCTCCACCAAAACC 1

RESULT 617
AAX77944/C
ID AAX77944 standard; DNA; 17 BP.
AC AAX77944;
XX
DT 16-AUG-1999 (first entry)
XX
DE Human tenascin binding primer 20.
XX
KW Tenascin; antipsoiasis; antivittiligo; anticancer; anti-inflammatory;
KW cardiovascular; treatment; disease; depigmentation; albinism; cancer;
KW psoriasis; vitiligo; metastasis; melanoma; inflammation; restenosis;
KW diagnosis; human; primer; ss.
XX
XX Synthetic.
OS Homo sapiens.
XX
XX Key Location/Qualifiers
FH misc_difference 1..4
FT /*tag= a
FT /note= "Nucleotides joined by phosphodiester or
FT phosphorothioate linkages"
FT misc_difference 9
FT /*tag= b
FT /note= "Nucleotide joined to others by phosphodiester or
FT phosphorothioate linkages"
FT modified_base 14..16
FT /*tag= c
FT /note= "Nucleotides joined by phosphodiester or
FT phosphorothioate linkages"
XX
XX DE19750702-A1.
XX
XX 27-MAY-1999.
XX
XX 15-NOV-1997; 97DE-01050702.
XX
XX 15-NOV-1997; 97DE-01050702.
XX
XX (HMRI ) HOECHST MARION ROUSSEL DEUT GMBH.
XX
XX Peyman A, Uhlmann E, Weiser C;
XX
XX WPI; 1999-314075/27.
XX
XX Antisense oligonucleotides that bind to sequences encoding human tenascin
XX for treating depigmentation, cancer, inflammation and cardiovascular
XX disease.
XX
XX Claim 20; Page 16; 18pp; German.
XX
XX This invention describes novel oligonucleotides with up to 17 optionally
XX modified nucleotides (nt), or their salts which are capable of binding to
XX a nucleic acid encoding an isoform of human tenascin, or a part of it.
XX The oligonucleotides of the invention have antipsoiasis, antivittiligo,
XX anticancer, anti-inflammatory and cardiovascular activity. The
XX oligonucleotides are used to treat or prevent diseases associated with
XX (over)expression of tenascin, particularly depigmentation (albinism,
XX psoriasis or vitiligo), cancer or metastases, particularly melanoma,
XX inflammation or cardiovascular disease (e.g. restenosis). A preferred
XX application is treatment of vitiligo. The oligonucleotides may also be

CC used for diagnosis of these diseases. AAX77925-X77981 represent the
CC primers used in the method of the invention
XX
XX Sequence 17 BP; 1 A; 0 C; 11 G; 5 T; 0 U; 0 Other;
Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1139 CCAGCTCCACTATACC 1155
   ||| ||||| |||
Db 17 CCACCTCCACCAAAACC 1

RESULT 618
AAA36202/C
ID AAA36202 standard; DNA; 17 BP.
XX
XX AAA36202;
AC
XX
DT 26-JUL-2000 (first entry)
XX
XX Human genomic SNP allele specific oligonucleotide SEQ ID NO:259.
XX
XX Human; single nucleotide polymorphism; SNP; genotyping; DNA analysis;
XX allele specific oligonucleotide; ASO; reduced complexity genome; RCG;
XX genomic classification; identification; DNA fingerprinting;
XX tumour characterisation; hybridisation; ss.
XX
XX Homo sapiens.
OS
XX
XX WO200018960-A2.
PN
XX
XX 06-APR-2000.
PD
XX
XX 24-SEP-1999; 99WO-US022283.
PF
XX
XX 25-SEP-1998; 98US-0101757P.
PR
XX
XX (MASI ) MASSACHUSETTS INST TECHNOLOGY.
PA
XX
XX Landers JE, Jordan B, Housman DE, Charest A;
PI
XX
XX WPI; 2000-293181/25.
DR
XX
XX Detection of single nucleotide polymorphisms in genomes by preparation
XX and analysis of reduced complexity genomes, useful for genotyping,
XX fingerprinting and determining allele frequency of SNPs.
XX
XX Disclosure; Page 61; 11ipp; English.
XX
XX A method has been developed for detecting the presence or absence of a
XX single nucleotide polymorphism (SNP) allele in a genomic sample. The
XX method comprises preparing a reduced complexity genome (RCG) from the
XX genomic sample and analysing the RCG for the presence or absence of a SNP
XX allele. The method can be used to characterise a tumour, to generate a
XX genomic pattern for an individual genome or to generate a genomic
XX classification code for a genome. The method can be used to assess
XX whether a subject is at risk for developing a disease or to identify a
XX set of SNP alleles associated with a disease. The method can also be used
XX to perform linkage analysis. AAA35944 to AAA35947 represent sequences
XX used in the exemplification of the present invention. AAA35948 to
XX AAA36632 represent nucleotide sequences containing SNPs
XX
XX Sequence 17 BP; 8 A; 3 C; 4 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 12.2; DB 1; Length 17;
XX Best Local Similarity 82.4%; Pred. No. 5.9e+02;
XX Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 936 CCTCTTCATTGGTTTAA 952
   ||| ||||| |||
Db 17 CCTCCTTATTGGTTTGA 1
```





CC erythropoietin, granulocyte colony stimulating factor protein and  
 XX interferon alpha  
 SQ Sequence 17 BP; 1 A; 8 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;  
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;  
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1170 CAACCTTGGCGCTCC 1186  
 ||||| ||||| |||||  
 Db 1 CACCTTTTCGGCTTCC 17

RESULT 624  
 AAF02098/c  
 ID AAF02098 standard; DNA; 17 BP.  
 XX  
 AC AAF02098;  
 XX  
 DT 16-FEB-2001 (first entry)  
 XX  
 DE Hammerhead ribozyme substrate #393.  
 XX  
 KW Ribozyme; erythropoietin; granulocyte colony stimulating factor;  
 KW interferon alpha; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200061729-A2.  
 XX  
 PD 19-OCT-2000.  
 XX  
 PF 11-APR-2000; 2000WO-US009721.  
 XX  
 PR 12-APR-1999; 99US-0129390P.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 XX  
 PI Blatt L, Zwick M, Pavco P, Mcswiggen J;  
 XX  
 DR WPI; 2000-647423/62.  
 XX  
 CC The present invention relates to enzymatic and antisense nucleic acid  
 CC molecules that act as inhibitors of the expression of repressor genes  
 CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription  
 CC factor gene, IRF-2 and/or the CAAT Displacement Protein (CDP).  
 CC Inhibition of the repressors removes prevents inhibition (and  
 CC consequently increases expression of) genes involved in the production of  
 CC erythropoietin, granulocyte colony stimulating factor protein and  
 CC interferon alpha  
 XX  
 SQ Sequence 17 BP; 5 A; 5 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;  
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;  
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1154 CCCCCTGGTCACTGTCC 1170  
 ||||| ||||| |||||  
 Db 17 CCGCGGTGATGTCTC 1

RESULT 625  
 AAF07059/c  
 ID AAF07059 standard; DNA; 17 BP.  
 XX

CC erythropoietin, granulocyte colony stimulating factor protein and  
 XX interferon alpha  
 SQ Sequence 17 BP; 1 A; 8 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;  
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;  
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1013 CTGAAAAGAGGGGAG 1029  
 ||||| ||||| |||||  
 Db 17 CTGAGAGAGGGGGGG 1

RESULT 626  
 AAF01964  
 ID AAF01964 standard; DNA; 17 BP.  
 XX  
 AC AAF01964;  
 XX  
 DT 16-FEB-2001 (first entry)  
 XX  
 DE Hammerhead ribozyme substrate #259.  
 XX  
 KW Ribozyme; erythropoietin; granulocyte colony stimulating factor;  
 KW interferon alpha; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200061729-A2.  
 XX  
 PD 19-OCT-2000.  
 XX  
 PF 11-APR-2000; 2000WO-US009721.  
 XX  
 PR 12-APR-1999; 99US-0129390P.  
 XX

Query Match 0.6%; Score 12.2; DB 1; Length 17;  
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;  
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1013 CTGAAAAGAGGGGAG 1029  
 ||||| ||||| |||||  
 Db 17 CTGAGAGAGGGGGGG 1

RESULT 626  
 AAF01964  
 ID AAF01964 standard; DNA; 17 BP.  
 XX  
 AC AAF01964;  
 XX  
 DT 16-FEB-2001 (first entry)  
 XX  
 DE Hammerhead ribozyme substrate #259.  
 XX  
 KW Ribozyme; erythropoietin; granulocyte colony stimulating factor;  
 KW interferon alpha; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200061729-A2.  
 XX  
 PD 19-OCT-2000.  
 XX  
 PF 11-APR-2000; 2000WO-US009721.  
 XX  
 PR 12-APR-1999; 99US-0129390P.  
 XX

XX (RIBO-) RIBOZYME PHARM INC.  
 XX Blatt L, Zwick M, Pavco P, Mcswiggen J;  
 XX WPI; 2000-647423/62.  
 DR Enzymatic and antisense nucleic acid inhibition of repressor genes,  
 PT useful for producing e.g. granulocyte colony stimulating factor protein,  
 PT interferon alpha and erythropoietin.  
 XX Claim 37; Page 61; 164pp; English.  
 XX The present invention relates to enzymatic and antisense nucleic acid  
 CC molecules that act as inhibitors of the expression of repressor genes  
 CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription  
 CC factor gene, IRF-2 and/or the C/EBP Displacement Protein (CDP).  
 CC Inhibition of the repressors removes prevents inhibition (and  
 CC consequently increases expression of) genes involved in the production of  
 CC erythropoietin, granulocyte colony stimulating factor protein and  
 CC interferon alpha  
 XX  
 SQ Sequence 17 BP; 3 A; 9 C; 1 G; 4 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 12.2; DB 1; Length 17;  
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;  
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1137 CTCGAGCTCCACCTATA 1153  
 DB 1 CTCGAGCTCCACCTATA 17  
 RESULT 627  
 AAF01742/c  
 ID AAF01742 standard; DNA; 17 BP.  
 XX AAF01742;  
 XX 16-FEB-2001 (first entry)  
 XX Hammerhead ribozyme substrate #37.  
 XX Ribozyme; erythropoietin; granulocyte colony stimulating factor;  
 KW interferon alpha; ss.  
 XX Homo sapiens.  
 XX WO200061729-A2.  
 XX 19-OCT-2000.  
 XX 11-APR-2000; 2000WO-US009721.  
 XX 12-APR-1999; 99US-0129390P.  
 XX (RIBO-) RIBOZYME PHARM INC.  
 XX Blatt L, Zwick M, Pavco P, Mcswiggen J;  
 XX WPI; 2000-647423/62.  
 XX Enzymatic and antisense nucleic acid inhibition of repressor genes,  
 PT useful for producing e.g. granulocyte colony stimulating factor protein,  
 PT interferon alpha and erythropoietin.  
 XX Claim 37; Page 56; 164pp; English.  
 XX The present invention relates to enzymatic and antisense nucleic acid  
 CC molecules that act as inhibitors of the expression of repressor genes  
 CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription  
 CC factor gene, IRF-2 and/or the C/EBP Displacement Protein (CDP).  
 CC Inhibition of the repressors removes prevents inhibition (and

CC consequently increases expression of) genes involved in the production of  
 CC erythropoietin, granulocyte colony stimulating factor protein and  
 CC interferon alpha  
 XX  
 SQ Sequence 17 BP; 2 A; 5 C; 4 G; 6 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 12.2; DB 1; Length 17;  
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;  
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1009 ACACCTGAAAAGAGGG 1025  
 DB 17 ACACCTGAAAAGACTGG 1  
 RESULT 628  
 AAF02604  
 ID AAF02604 standard; DNA; 17 BP.  
 XX AAF02604;  
 XX 16-FEB-2001 (first entry)  
 XX Hammerhead ribozyme substrate #899.  
 XX Ribozyme; erythropoietin; granulocyte colony stimulating factor;  
 KW interferon alpha; ss.  
 XX Homo sapiens.  
 XX WO200061729-A2.  
 XX 19-OCT-2000.  
 XX 11-APR-2000; 2000WO-US009721.  
 XX 12-APR-1999; 99US-0129390P.  
 XX (RIBO-) RIBOZYME PHARM INC.  
 XX Blatt L, Zwick M, Pavco P, Mcswiggen J;  
 XX WPI; 2000-647423/62.  
 XX Enzymatic and antisense nucleic acid inhibition of repressor genes,  
 PT useful for producing e.g. granulocyte colony stimulating factor protein,  
 PT interferon alpha and erythropoietin.  
 XX Claim 37; Page 76; 164pp; English.  
 XX The present invention relates to enzymatic and antisense nucleic acid  
 CC molecules that act as inhibitors of the expression of repressor genes  
 CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription  
 CC factor gene, IRF-2 and/or the C/EBP Displacement Protein (CDP).  
 CC Inhibition of the repressors removes prevents inhibition (and  
 CC consequently increases expression of) genes involved in the production of  
 CC erythropoietin, granulocyte colony stimulating factor protein and  
 CC interferon alpha  
 XX  
 SQ Sequence 17 BP; 3 A; 2 C; 7 G; 5 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 12.2; DB 1; Length 17;  
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;  
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 787 GAGTGTGTCTCCTGTAG 803  
 DB 1 GAGTGTGTCAACTGTGG 17  
 RESULT 629  
 AAF07190  
 ID AAF07190 standard; DNA; 17 BP.



CC Inhibition of the repressors removes prevents inhibition (and  
 CC consequently increases expression of) genes involved in the production of  
 CC erythropoietin, granulocyte colony stimulating factor protein and  
 CC interferon alpha  
 XX  
 SQ Sequence 17 BP; 9 A; 3 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;  
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;  
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1034 AAGGAAGTACTACTAAG 1050  
 ||| ||||| |||  
 Db 1 AAGAAAGTACTGCAAG 17

RESULT 632

AAF01929

ID AAF01929 standard; DNA; 17 BP.

XX AC AAF01929;

XX DT 16-FEB-2001 (first entry)

XX DE Hammerhead ribozyme substrate #224.

XX KW Ribozyme; erythropoietin; granulocyte colony stimulating factor;

XX KW interferon alpha; ss.

XX OS Homo sapiens.

XX PN WO200061729-A2.

XX PD 19-OCT-2000.

XX PF 11-APR-2000; 2000WO-US009721.

XX PR 12-APR-1999; 99US-0129390P.

XX PA (RIBO-) RIBOZYME PHARM INC.

XX PI Blatt L, Zwick M, Pavco P, Mcswiggen J;

XX DR WPI; 2000-647423/62.

XX Enzymatic and antisense nucleic acid inhibition of repressor genes,  
 useful for producing e.g. granulocyte colony stimulating factor protein,  
 interferon alpha and erythropoietin.

PS Claim 37; Page 61; 164pp; English.

XX The present invention relates to enzymatic and antisense nucleic acid  
 CC molecules that act as inhibitors of the expression of repressor genes  
 CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription  
 CC factor gene, IRF-2 and/or the CAAT Displacement Protein (CDP).  
 CC Inhibition of the repressors removes prevents inhibition (and  
 CC consequently increases expression of) genes involved in the production of  
 CC erythropoietin, granulocyte colony stimulating factor protein and  
 CC interferon alpha  
 XX

SQ Sequence 17 BP; 1 A; 8 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;

Best Local Similarity 82.4%; Pred. No. 5.9e+02;

Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1169 CCACCTTTTCGGCTCC 1185

||| ||||| |||

Db 1 CCACCTTTTCGGCTCC 17

RESULT 633

AAF06045/c

ID AAF06045 standard; DNA; 17 BP.

XX AC AAF06045;

XX DT 16-FEB-2001 (first entry)

XX DE Hammerhead ribozyme substrate #2842.

XX KW Ribozyme; erythropoietin; granulocyte colony stimulating factor;

XX KW interferon alpha; ss.

XX OS Homo sapiens.

XX PN WO200061729-A2.

XX PD 19-OCT-2000.

XX PF 11-APR-2000; 2000WO-US009721.

XX PR 12-APR-1999; 99US-0129390P.

XX PA (RIBO-) RIBOZYME PHARM INC.

XX PI Blatt L, Zwick M, Pavco P, Mcswiggen J;

XX DR WPI; 2000-647423/62.

XX Enzymatic and antisense nucleic acid inhibition of repressor genes,  
 useful for producing e.g. granulocyte colony stimulating factor protein,  
 interferon alpha and erythropoietin.

PS Claim 42; Page 121; 164pp; English.

XX The present invention relates to enzymatic and antisense nucleic acid  
 CC molecules that act as inhibitors of the expression of repressor genes  
 CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription  
 CC factor gene, IRF-2 and/or the CAAT Displacement Protein (CDP).  
 CC Inhibition of the repressors removes prevents inhibition (and  
 CC consequently increases expression of) genes involved in the production of  
 CC erythropoietin, granulocyte colony stimulating factor protein and  
 CC interferon alpha  
 XX

SQ Sequence 17 BP; 3 A; 2 C; 7 G; 0 T; 5 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;

Best Local Similarity 82.4%; Pred. No. 5.9e+02;

Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1040 CTACTACTAAGCCCTG 1056

||| ||||| |||

Db 17 CCATTACTAAGCCCTG 1

RESULT 634

AAF07060/c

ID AAF07060 standard; DNA; 17 BP.

XX AC AAF07060;

XX DT 16-FEB-2001 (first entry)

XX DE Hammerhead ribozyme substrate #3317.

XX KW Ribozyme; erythropoietin; granulocyte colony stimulating factor;

XX KW interferon alpha; ss.

XX OS Homo sapiens.

XX PN WO200061729-A2.

XX PD 19-OCT-2000.

XX PF 11-APR-2000; 2000WO-US009721.

XX PR 12-APR-1999; 99US-0129390P.  
 XX PA (RIBO-) RIBOZYME PHARM INC.  
 XX PI Blatt L, Zwick M, Pavco P, Mcswiggen J;  
 XX DR WPI; 2000-647423/62.  
 XX CC Enzymatic and antisense nucleic acid inhibition of repressor genes,  
 XX PT useful for producing e.g. granulocyte colony stimulating factor protein,  
 XX PT interferon alpha and erythropoietin.  
 XX PS Claim 54; Page 132; 164pp; English.  
 XX CC The present invention relates to enzymatic and antisense nucleic acid  
 CC molecules that act as inhibitors of the expression of repressor genes  
 CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription  
 CC factor gene, IRF-2 and/or the CAAAT Displacement Protein (CDP).  
 CC Inhibition of the repressors removes prevents inhibition (and  
 CC consequently increases expression of) genes involved in the production of  
 CC erythropoietin, granulocyte colony stimulating factor protein and  
 CC interferon alpha  
 XX SQ Sequence 17 BP; 1 A; 8 C; 2 G; 6 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 12.2; DB 1; Length 17;  
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;  
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1010 CACTGAAAGAGGGG 1026  
 DB 17 CAACTGAGAGGAGGGG 1  
 RESULT 635  
 AAF07118  
 ID AAF07118 standard; DNA; 17 BP.  
 XX AC AAF07118;  
 XX DT 16-FEB-2001 (first entry)  
 XX DE Hammerhead ribozyme substrate #3375.  
 XX KW Ribozyme; erythropoietin; granulocyte colony stimulating factor;  
 KW interferon alpha; ss.  
 XX OS Homo sapiens.  
 XX PN WO200061729-A2.  
 XX PD 19-OCT-2000.  
 XX PF 11-APR-2000; 2000WO-US009721.  
 XX PR 12-APR-1999; 99US-0129390P.  
 XX PA (RIBO-) RIBOZYME PHARM INC.  
 XX PI Blatt L, Zwick M, Pavco P, Mcswiggen J;  
 XX DR WPI; 2000-647423/62.  
 XX CC Enzymatic and antisense nucleic acid inhibition of repressor genes,  
 XX PT useful for producing e.g. granulocyte colony stimulating factor protein,  
 XX PT interferon alpha and erythropoietin.  
 XX PS Claim 54; Page 133; 164pp; English.  
 XX CC The present invention relates to enzymatic and antisense nucleic acid  
 CC molecules that act as inhibitors of the expression of repressor genes  
 CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription

CC factor gene, IRF-2 and/or the CAAAT Displacement Protein (CDP).  
 CC Inhibition of the repressors removes prevents inhibition (and  
 CC consequently increases expression of) genes involved in the production of  
 CC erythropoietin, granulocyte colony stimulating factor protein and  
 CC interferon alpha  
 XX SQ Sequence 17 BP; 2 A; 11 C; 3 G; 1 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 12.2; DB 1; Length 17;  
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;  
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1249 GACCCATCCCAACCC 1265  
 DB 1 GGCCCATCCCCAGCC 17  
 RESULT 636  
 AAA70569/c  
 ID AAA70569 standard; DNA; 17 BP.  
 XX AC AAA70569;  
 XX DT 06-DEC-2000 (first entry)  
 XX DE Shear Stress Response Element from PGDF-A gene.  
 XX KW Cytostatic; cardiant; vasotropic; vulnary; antidiabetic; hypotensive;  
 KW atherosclerotic; antilipemic; gene therapy; vector; SSRE; promoter;  
 KW Shear Stress Response Element; antisense; ribozyme; repressor antibody;  
 KW platelet derived growth factor A; PDGF-A; angiogenesis; ischaemia;  
 KW cardiovascular disorder; neoplastic disorder; atherosclerosis; ss;  
 KW hypertension; diabetes; hypercholesterolaemia; wound healing.  
 XX OS Homo sapiens.  
 XX PN WO200039275-A2.  
 XX PD 06-JUL-2000.  
 XX PF 23-DEC-1999; 99WO-IL000702.  
 XX PR 24-DEC-1998; 98US-00220510.  
 XX PR 24-DEC-1998; 98US-0113863P.  
 XX PA (FLOR-) FLORENCE MEDICAL LTD.  
 XX PI Resnick N;  
 XX DR WPI; 2000-452382/39.  
 XX PT Expression vector comprising multiple shear stress response elements,  
 XX PT useful for modulating endothelial cell proliferation, stimulating or down  
 XX PT -regulating angiogenesis and treating vasculogenic/angiogenic disorders.  
 XX PS Example 1; Page 45; 61pp; English.  
 XX CC The invention relates to the construction of a vector which comprises a  
 CC multiple number of Shear Stress Response Elements (SSRE) from various  
 CC gene promoter sequences and one or more genes, antisense molecules,  
 CC ribozymes, double stranded RNA, or a nucleic acid which encodes a  
 CC repressor antibody or a mutant protein which inhibits the synthesis of,  
 CC or activity of the protein or peptide. This sequence represents the SSRE  
 CC sequence from the promoter of the platelet-derived growth factor A (PDGF-  
 CC A). The vector is useful for stimulating or inhibiting vascular  
 CC endothelial cell or capillary endothelial cell proliferation and for  
 CC stimulating angiogenesis in cells. The vector or gene of interest is  
 CC useful for modulating vascular permeability in a mammal, for stimulating  
 CC or inhibiting the formation, maturation or regression of blood vessels,  
 CC modulating genes or proteins involved in a diseases, down regulating  
 CC angiogenesis and for treating vasculogenic and/or angiogenic disorders.  
 CC These disorders include cardiovascular disorder, neoplastic disorders,  
 CC ischaemia, atherosclerosis, hypertension, diabetes, hypercholesterolaemia



CC and wound healing  
 XX Sequence 17 BP; 0 A; 2 C; 15 G; 0 T; 0 U; 0 Other;  
 SQ Query Match 0.6%; Score 12.2; DB 1; Length 17;  
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;  
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1238 CCCTCGCCTCGACCC 1254  
 DB ||| ||| ||| ||| |||  
 17 CCCTCGCCTCGACCC 1  
 RESULT 637  
 ABK03092  
 ID ABK03092 standard; RNA; 17 BP.  
 AC ABK03092;  
 XX  
 DT 12-MAR-2002 (first entry)  
 XX  
 DE Human CD20 Inozyme #43.  
 XX  
 KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;  
 KW cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;  
 KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;  
 KW DNazyme; inozyme; G-cleaver; amberyne; zinzyme; lymphoma; leukaemia;  
 KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;  
 KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;  
 KW MCL; immunocytoma; IMC; immune thrombocytopenia; stroke; dementia;  
 KW inflammatory arthropathy; central nervous system injury;  
 KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;  
 KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;  
 KW Parkinson's disease; ataxia; Huntington's disease;  
 KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.  
 XX  
 OS Homo sapiens.  
 OS Synthetic.  
 XX  
 PN WO200159103-A2.  
 XX 16-AUG-2001.  
 XX  
 XX 09-FEB-2001; 2001WO-US004273.  
 XX 11-FEB-2000; 2000US-0181797P.  
 XX 28-FEB-2000; 2000US-0185516P.  
 XX 06-MAR-2000; 2000US-0187128P.  
 XX (RIBO-) RIBOZYME PHARM INC.  
 PA (BLAT/) BLATT L.  
 PA (MCSW/) MCSWIGGEN J.  
 PA (CHOW/) CHOWRIRA B M.  
 XX  
 XX Blatt L, Mcswiggen J, Chowrira BM;  
 PI WPI; 2001-607195/69.  
 DR  
 XX  
 XX Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense  
 PT constructs, which down regulate expression of a CD20 gene or neurite  
 PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and  
 PT central nervous system injury.  
 XX  
 FS Claim 30; Page 146; 200pp; English.  
 XX  
 CC The invention relates to a nucleic acid molecule which down regulates  
 CC expression of a CD20 gene and a nucleic acid molecule which down  
 CC regulates expression of a neurite growth inhibitor gene (NOGO). The  
 CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a  
 CC DNazyme) an inozyme (an endolytic nucleic acid cleaving an RNA molecule  
 CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NVN motif) or  
 CC an amberyne (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA  
 CC with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA

CC of CD20 in the presence of a divalent cation that is preferably  $Mg^{2+}$ .  
 CC Furthermore, it may be contacted with a cell to reduce CD20 activity of  
 CC the cell and treat a patient having a condition associated with the level  
 CC of CD20. The treatment may further comprise the use of one or more  
 CC therapies. In particular, the CD20 targeting nucleic acid may be used to  
 CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-  
 CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic  
 CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell  
 CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,  
 CC immune thrombocytopenia, and inflammatory arthropathy. The NOGO-  
 CC targeting nucleic acid is used to cleave RNA of the NOGO gene in the  
 CC presence of a divalent cation that is preferably  $Mg^{2+}$ . Furthermore, the  
 CC nucleic acid may be contacted with a cell to reduce NOGO activity of the  
 CC cell and treat a patient having a condition associated with the level of  
 CC NOGO. The treatment may further comprise the use of one or more  
 CC therapies. In particular, the NOGO-targeting nucleic acid may be used to  
 CC treat central nervous system (CNS) injury and cerebrovascular accident  
 CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),  
 CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),  
 CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob  
 CC disease, muscular dystrophy, and/or other neurodegenerative disease  
 CC states which respond to the modulation of NOGO expression. The present  
 CC sequence is an inozyme of the invention  
 XX  
 SQ Sequence 17 BP; 6 A; 7 C; 1 G; 0 T; 3 U; 0 Other;  
 Query Match 0.6%; Score 12.2; DB 1; Length 17;  
 Best Local Similarity 70.6%; Pred. No. 5.9e+02;  
 Matches 12; Conservative 2; Mismatches 3; Indels 0; Gaps 0;  
 QY 1060 CCAACCCCAAGCTTCAG 1076  
 DB ||| ||| ||| ||| |||  
 1 CCAACCCACACUCUCAG 17  
 RESULT 638  
 ABK01807/c  
 ID ABK01807 standard; RNA; 17 BP.  
 XX  
 AC ABK01807;  
 XX  
 DT 12-MAR-2002 (first entry)  
 XX  
 DE Human NOGO Zinzyme #129.  
 XX  
 KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;  
 KW cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;  
 KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;  
 KW DNazyme; inozyme; G-cleaver; amberyne; zinzyme; lymphoma; leukaemia;  
 KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;  
 KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;  
 KW MCL; immunocytoma; IMC; immune thrombocytopenia; stroke; dementia;  
 KW inflammatory arthropathy; central nervous system injury;  
 KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;  
 KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;  
 KW Parkinson's disease; ataxia; Huntington's disease;  
 KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.  
 XX  
 OS Homo sapiens.  
 OS Synthetic.  
 XX  
 PN WO200159103-A2.  
 XX 16-AUG-2001.  
 XX  
 XX 09-FEB-2001; 2001WO-US004273.  
 XX 11-FEB-2000; 2000US-0181797P.  
 XX 28-FEB-2000; 2000US-0185516P.  
 XX 06-MAR-2000; 2000US-0187128P.  
 XX (RIBO-) RIBOZYME PHARM INC.  
 PA (BLAT/) BLATT L.  
 PA (MCSW/) MCSWIGGEN J.  
 PA (CHOW/) CHOWRIRA B M.  
 XX  
 XX Blatt L, Mcswiggen J, Chowrira BM;  
 PI WPI; 2001-607195/69.  
 DR  
 XX  
 XX Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense  
 PT constructs, which down regulate expression of a CD20 gene or neurite  
 PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and  
 PT central nervous system injury.  
 XX  
 FS Claim 30; Page 146; 200pp; English.  
 XX  
 CC The invention relates to a nucleic acid molecule which down regulates  
 CC expression of a CD20 gene and a nucleic acid molecule which down  
 CC regulates expression of a neurite growth inhibitor gene (NOGO). The  
 CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a  
 CC DNazyme) an inozyme (an endolytic nucleic acid cleaving an RNA molecule  
 CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NVN motif) or  
 CC an amberyne (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA  
 CC with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA

PA (MCSW/) MCSWIGGEN J.  
 PA (CHOW/) CHOWRIRA B M.  
 XX Blatt L, Mcswiggen J, Chowrira BM;  
 XX WPI; 2001-607195/69.  
 XX  
 XX Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense  
 PT constructs, which down regulate expression of a CD20 gene or neurite  
 PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and  
 PT central nervous system injury.  
 XX  
 XX Claim 88; Page 98; 200pp; English.  
 XX  
 XX The invention relates to a nucleic acid molecule which down regulates  
 CC expression of a CD20 gene and a nucleic acid molecule which down  
 CC regulates expression of a neurite growth inhibitor gene (NOGO). The  
 CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a  
 CC DNAzyme) an Inozyme (an endolytic nucleic acid cleaving an RNA molecule  
 CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or  
 CC an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA  
 CC with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA  
 CC of CD20 in the presence of a divalent cation that is preferably Mg<sup>2+</sup>.  
 CC Furthermore, it may be contacted with a cell to reduce CD20 activity of  
 CC the cell and treat a patient having a condition associated with the level  
 CC of CD20. The treatment may further comprise the use of one or more  
 CC therapies. In particular, the CD20 targeting nucleic acid may be used to  
 CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-  
 CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic  
 CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell  
 CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,  
 CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-  
 CC targeting nucleic acid is used to cleave RNA of the NOGO gene in the  
 CC presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, the  
 CC nucleic acid may be contacted with a cell to reduce NOGO activity of the  
 CC cell and treat a patient having a condition associated with the level of  
 CC NOGO. The treatment may further comprise the use of one or more  
 CC therapies. In particular, the NOGO-targeting nucleic acid may be used to  
 CC treat central nervous system (CNS) injury and cerebrovascular accident  
 CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),  
 CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),  
 CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob  
 CC disease, muscular dystrophy, and/or other neurodegenerative disease  
 CC states which respond to the modulation of NOGO expression. The present  
 CC sequence is a zinzyme molecule of the invention  
 XX  
 SQ Sequence 17 BP; 3 A; 2 C; 9 G; 0 T; 3 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;  
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;  
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1128 CACCTTCACCTCCAGCT 1144  
 ||| |||||  
 Db 17 CTCGAGCAGCTCCAGCT 1

RESULT 639  
 ABA80784  
 ID ABA80784 standard; DNA; 17 BP.  
 XX  
 AC ABA80784;  
 XX

DT 24-JAN-2002 (first entry)

XX LDLR mutation correcting oligonucleotide SEQ ID NO: 3630.

XX Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;  
 KW retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;  
 KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;  
 KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;  
 KW haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;  
 KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;

KW familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;  
 KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;  
 KW Alzheimer's disease; cytostatic; anticisickling; antianaemic; haemostatic;  
 KW antilipemic; ss.

XX Homo sapiens.

XX WO200173002-A2.

PD 04-OCT-2001.

XX 27-MAR-2001; 2001WO-US0009761.

XX 27-MAR-2000; 2000US-0192176P.

PR 27-MAR-2000; 2000US-0192179P.

PR 01-JUN-2000; 2000US-0209538P.

PR 30-OCT-2000; 2000US-0244989P.

XX (UYDE ) UNIV DELAWARE.

XX Kmiec EB, Gamper HB, Rice MC;

XX WPI; 2001-639230/73.

XX Oligonucleotide for targeted alterations of genetic sequences and for  
 PT treating cystic fibrosis, comprises at least one mismatch and chemical  
 PT modification.

XX Claim 7; Page 242; 294pp; English.

XX The present invention provides single-stranded oligonucleotides which can  
 CC be used for the targeted alteration of genomic sequences, where the  
 CC oligonucleotide has at least one mismatch compared with the genomic  
 CC sequence to be altered. In particular, these sequences are directed at  
 CC the following genes: adenosine deaminase, p53, beta-globin,  
 CC retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A  
 CC (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus  
 CC 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,  
 CC apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase  
 CC (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and  
 CC presenilin-2 (PSEN2). These can be used in the gene therapy of diseases  
 CC such as cancer, adenosine deaminase deficiency, cystic fibrosis,  
 CC haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,  
 CC Alzheimer's disease, melanoma, adenomatous polyposis of the colon and  
 CC various syndromes. The present sequence is one of the gene correcting  
 CC oligonucleotides of the invention

XX Sequence 17 BP; 2 A; 10 C; 2 G; 3 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;

Best Local Similarity 82.4%; Pred. No. 5.9e+02;

Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1142 GCTCCACCTATACCCCC 1158

|||||  
 Db 1 GCTCCACCTGCATCCCC 17

RESULT 640

ABA80785/C

ID ABA80785 standard; DNA; 17 BP.

XX ABA80785;

DT 24-JAN-2002 (first entry)

XX LDLR mutation correcting oligonucleotide SEQ ID NO: 3631.

XX Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;  
 KW retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;  
 KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;  
 KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;  
 KW haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;  
 KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;

KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;  
 KW familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;  
 KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;  
 KW Alzheimer's disease; cytostatic; antiskilling; antianaemic; haemostatic;  
 KW antileptic; ss.

XX Homo sapiens.

OS WO200173002-A2.

PN 04-OCT-2001.

XX 27-MAR-2001; 2001WO-US009761.

XX 27-MAR-2000; 2000US-0192176P.

PR 27-MAR-2000; 2000US-0192179P.

PR 01-JUN-2000; 2000US-0208538P.

PR 30-OCT-2000; 2000US-0244989P.

XX (UYDE ) UNIV DELAWARE.

XX Kmiec EB, Gamper HB, Rice MC;

PI WPI; 2001-639230/73.

XX Oligonucleotide for targeted alterations of genetic sequences and for

PT treating cystic fibrosis, comprises at least one mismatch and chemical

PT modification.

XX Claim 7; Page 242; 294pp; English.

XX The present invention provides single-stranded oligonucleotides which can

CC be used for the targeted alteration of genomic sequences, where the

CC oligonucleotide has at least one mismatch compared with the genomic

CC sequence to be altered. In particular, these sequences are directed at

CC the following genes: adenosine deaminase, p53, beta-globin,

CC retinoblastoma, BRCA1, BRCA2, CTR, cyclin-dependent kinase inhibitor 2A

CC (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus

CC 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,

CC apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase

CC (UGT1), amyloid precursor protein (APP), presenilin-1 (PSEN1) and

CC presenilin-2 (PSEN2). These can be used in the gene therapy of diseases

CC such as cancer, adenosine deaminase deficiency, cystic fibrosis,

CC haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,

CC Alzheimer's disease, melanoma, adenomatous polyposis of the colon and

CC various syndromes. The present sequence is one of the gene correcting

CC oligonucleotides of the invention

XX Sequence 17 BP; 3 A; 2 C; 10 G; 2 T; 0 U; 0 Other;

XX Query Match 0.6%; Score 12.2; DB 1; Length 17;

XX Best Local Similarity 82.4%; Pred. No. 5.9e+02;

XX Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1142 GGTCCACCTGATACCCCC 1158

DB 17 GGTCCACCTGATACCC 1

RESULT 641

AAC91135/c

ID AAC91135 standard; DNA; 17 BP.

XX AAC91135;

AC 20-MAR-2001 (first entry)

XX Fungal pathogenic species identification probe #21.

XX Fungal pathogenic; Internal Transcribed Spacer; ITS;

XX Opportunistic infection; ss.

XX Unidentified.

XX WO200073499-A2.

PN 07-DEC-2000.

XX 24-MAY-2000; 2000WO-EP004714.

XX 28-MAY-1999; 99EP-00870109.

PR 11-JUN-1999; 99US-0138621P.

XX (INNO-) INNOGENETICS NV.

PA (IRBI-) ENTERPRISE IRELAND T/A BIORESEARCH IRELA.

XX Smith T, Maher M, Martin C, James G, Rossau R, Van Der Weide M;

PI WPI; 2001-061555/07.

XX Detecting and identifying fungal pathogens, especially Candida,

PT Cryptococcus and Aspergillus, comprises hybridizing the amplified nucleic

PT acid of the fungal pathogen with a probe from the internal transcribed

PT spacer region of a DNA.

XX Claim 1; Page 46; 59pp; English.

XX The present invention relates to detecting and identifying fungal

CC pathogenic species in a sample. The method involves hybridizing a nucleic

CC acid of a fungal pathogen possibly present in the sample with at least

CC one oligonucleotide probe, from an internal transcribed spacer (ITS)

CC region. The method is useful for simultaneous detection and

CC differentiation of clinically important fungi in a single assay,

CC particularly Candida albicans, C. parapsilosis, C. tropicalis, C. kefyr,

CC C. krusei, C. glabrata, C. dubliniensis, Aspergillus flavus, A.

CC versicole, A. nidulans, A. fumigatus, C. neoformans and pneumocystis

CC carinii. The method is especially useful in the detection of

CC opportunistic infections in patients with impaired immunity systems, such

CC as organ transplant patients, patients receiving intensive anticancer

CC treatments, diabetics or AIDS patients

XX Sequence 17 BP; 1 A; 7 C; 7 G; 2 T; 0 U; 0 Other;

SQ Query Match 0.6%; Score 12.2; DB 1; Length 17;

XX Best Local Similarity 82.4%; Pred. No. 5.9e+02;

XX Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1179 GACTCCCCCAGAGAGG 1195

DB 17 GACTCCCCCAGAGAGG 1

RESULT 642

AAH48172/c

ID AAH48172 standard; DNA; 17 BP.

XX AAH48172;

AC 20-SEP-2001 (first entry)

XX Human TNF-308 allele 1 probe.

XX Asthma; polymorphism; major histocompatibility complex; MHC; probe;

KW chromosome 6p; human; tumour necrosis factor; TNF; ss.

XX Homo sapiens.

XX US2001007741-A1.

PN 12-JUL-2001.

XX 10-APR-1998; 98US-00058165.

XX 11-APR-1997; 97US-0043856P.

XX (COOK/) COOKSON W O C M.

PA (MOFF/) MOFFATT M F.  
 XX Cookson WOCM, Moffatt MF;  
 XX WPI; 2001-432309/46.  
 DR  
 XX  
 PT Diagnosing or prognosing an individual as being asthmatic by detecting  
 PT for the presence of an unusual variant form, which is associated with  
 PT increased tumor necrosis factor secretion, of a polymorphic sequence in  
 PT chromosome 6p MHC region.  
 XX  
 XX  
 PS Example; Page 3; 8pp; English.  
 XX  
 CC The present invention relates to a method for diagnosing or prognosing an  
 CC individual as being asthmatic, or as having a predisposition to asthma.  
 CC The method comprises demonstrating in the individual the presence of an  
 CC unusual variant form of at least one polymorphic sequence in the major  
 CC histocompatibility complex (MHC) region of chromosome 6p, where the  
 CC unusual variant form is associated with an increased secretion of tumour  
 CC necrosis factor (TNF). The method is also useful for predicting the  
 CC clinical course of asthma, both in individuals and across populations.  
 CC This may be used to identify asthmatic individuals who may respond to  
 CC treatment directed against TNF or other pro-inflammatory molecules which  
 CC interact with TNF. The present sequence is a probe for TNF-308 allele 1.  
 CC This probe was used to illustrate the present invention  
 XX  
 XX  
 SQ Sequence 17 BP; 3 A; 2 C; 11 G; 1 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 12.2; DB 1; Length 17;  
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;  
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1252 CCATCCCAACCCCGCT 1268  
 ||| ||||| |||||  
 Db 17 CCGCTCCCATGCGCCCT 1  
 RESULT 643  
 AAF54961/C  
 ID AAF54961 standard; DNA; 17 BP.  
 XX  
 AC AAF54961;  
 XX  
 DT 15-MAY-2001 (first entry)  
 XX  
 DE 5' primer used to amplify coat protein sequences of CGMMV isolates.  
 XX  
 KW Replicase; CGMMV; CGMMV infection; transgenic plant; Cucurbitaceae;  
 KW PCR primer; ss.  
 XX  
 OS Cucurbit green mottle mosaic virus.  
 XX  
 PN WO200109300-A2.  
 XX  
 PD 08-FEB-2001.  
 XX  
 XX 27-JUL-2000; 2000WO-NL000534.  
 XX  
 PR 02-AUG-1999; 99EP-00202540.  
 XX  
 PA (KEYG-) KEYGENE NV.  
 XX  
 PI Flerens-Onstenk BGJ, De Both MTJ;  
 XX  
 DR WPI; 2001-159863/16.  
 XX  
 CC Generating plants resistant to cucumber green mottle mosaic virus  
 PT infection, comprises transforming a plant with a polynucleotide that  
 PT expressed produces resistance against infection and does not produce  
 PT replicase activity.  
 XX  
 PS Example 1; Page 20; 88pp; English.  
 XX

CC PCR primers AAF54960-63 were used to amplify DNA encoding the coat  
 CC proteins of cucumber green mottle mosaic virus (CGMMV) isolates. The  
 CC amplified sequence was used to produce a DNA construct which, upon  
 CC transformation into a plant and transcription into RNA, generates  
 CC resistance against infection with CGMMV in the plant, and does not lead  
 CC to generation of any replicase activity in the plant. The method is  
 CC useful for protecting plants susceptible to CGMMV infection and for  
 CC generating resistant plants against CGMMV, particularly those plants of  
 CC the Cucurbitaceae family  
 XX  
 XX Sequence 17 BP; 0 A; 1 C; 9 G; 7 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 12.2; DB 1; Length 17;  
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;  
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1290 CCACAGCCACAGAGCC 1306  
 ||||| ||||| |||||  
 Db 17 CCACAAACCCACACGCC 1

RESULT 644  
 AAF83170  
 ID AAF83170 standard; DNA; 17 BP.  
 XX  
 AC AAF83170;  
 XX  
 DT 09-JUL-2001 (first entry)  
 XX  
 DE Probe PN(n)G used in detection by allele specific extension.  
 XX  
 KW Immobilisation; chemical; biological; polynucleotide amplification;  
 KW nucleic acid detection; probe; hybridisation; PCR primer; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO200127327-A2.  
 XX  
 PD 19-APR-2001.  
 XX  
 PF 06-OCT-2000; 2000WO-US027872.  
 XX  
 PR 08-OCT-1999; 99US-0158315P.  
 XX  
 PA (PROT-) PROTOGENE LAB INC.  
 XX  
 PI Brennan TM, Chatelein F, Berninger M;  
 XX  
 DR WPI; 2001-290733/30.  
 XX  
 XX Apparatus and method for performing a large number of chemical and  
 PT biological reactions by bringing two arrays into close apposition and  
 PT allowing reactants on the surfaces of the two arrays to come into  
 PT contact.  
 XX  
 PS Example 11; Fig 18B; 112pp; English.  
 XX  
 CC The invention provides a novel system for performing reactions, that  
 CC comprises a first solid support with a reactant of each reaction  
 CC immobilized on to it, and a second solid support either providing a  
 CC second reactant confined to a specific area on the surface, or a chemical  
 CC/mechanical separation of the reactions, where the first and second solid  
 CC supports are assembled to provide an environment for performing the  
 CC reactions in parallel. The methods and apparatus are useful for  
 CC performing a large number of chemical and biological reactions,  
 CC especially polynucleotide amplification reactions and the detection of  
 CC sequence variations, expression levels and their functions. The method is  
 CC capable of generating large amounts of data or products per unit time by  
 CC carrying out large numbers of reactions in parallel. The process is also  
 CC amenable to full automation. Sequences AAF83164-179 represent probes used  
 CC in detecting amplified products by allele specific extension, the  
 CC products amplified by performing large numbers of PCR reactions using  
 CC array-immobilised and releasable primers



CC nucleic acids can be used as probes to detect, characterise and quantify  
 CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to  
 CC provide initial substrates for the recombinant engineering of hGDMPLP-1  
 CC protein variants having desired phenotypic improvements, and for  
 CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be  
 CC used as immunogens to raise antibodies that specifically recognise hGDMPLP  
 CC -1 proteins, as standards in assays used to determine the concentration  
 CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule  
 CC capture probes for surface-enhanced laser desorption/ionisation, as  
 CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1  
 CC production, and in vaccines or for replacement therapy. The  
 CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a  
 CC disorder associated with the expression of hGDMPLP-1, in particular heart  
 CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.  
 CC The present sequence represents an oligomer used in the screening of the  
 CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.  
 CC The sequence data for this patent did not form part of the printed  
 CC specification, but was obtained in electronic format directly from WIPO  
 CC at ftp.wipo.int/pub/published\_pct\_sequence  
 XX  
 SQ Sequence 17 BP; 4 A; 4 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;  
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;  
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 749 TGTGCACCTGCCATGCA 765  
 || ||||| |||||  
 Db 17 TGGGCACCTTCCTGCA 1

RESULT 647  
 ABN00316  
 ID ABN00316 standard; DNA; 17 BP.  
 AC ABN00316;  
 DT 29-MAY-2002 (first entry)  
 XX  
 DE Human GDMPLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:308.  
 XX  
 KW Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;  
 KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;  
 KW skeletal muscle disorder; amplicon; screening; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200192524-A2.  
 XX  
 PD 06-DEC-2001.  
 XX  
 PF 25-MAY-2001; 2001WO-US016981.  
 XX

26-MAY-2000; 2000US-0207456P.  
 PR 21-SEP-2000; 2000US-0234687P.  
 PR 27-SEP-2000; 2000US-0236359P.  
 PR 04-OCT-2000; 2000GB-00024263.  
 PR 30-JAN-2001; 2001WO-US000661.  
 PR 30-JAN-2001; 2001WO-US000662.  
 PR 30-JAN-2001; 2001WO-US000663.  
 PR 30-JAN-2001; 2001WO-US000664.  
 PR 30-JAN-2001; 2001WO-US000665.  
 PR 30-JAN-2001; 2001WO-US000666.  
 PR 30-JAN-2001; 2001WO-US000667.  
 PR 30-JAN-2001; 2001WO-US000668.  
 PR 30-JAN-2001; 2001WO-US000669.  
 PR 30-JAN-2001; 2001WO-US000670.  
 PR 05-FEB-2001; 2001US-0266860P.  
 XX  
 PA (AEOM-) AEMICA INC.  
 XX

Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;  
 XX

DR WPI; 2002-179446/23.

XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,  
 PT or as specific biomolecule capture probes for surface-enhanced laser  
 PT desorption/ionization, comprises human myosin-like protein hGDMPLP-1.  
 XX  
 XX Disclosure; SEQ ID NO 308; 214pp; English.

XX The present invention describes a human genome-derived myosin-like  
 CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-  
 CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1  
 CC nucleic acids can be used as probes to detect, characterise and quantify  
 CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to  
 CC provide initial substrates for the recombinant engineering of hGDMPLP-1  
 CC protein variants having desired phenotypic improvements, and for  
 CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be  
 CC used as immunogens to raise antibodies that specifically recognise hGDMPLP  
 CC -1 proteins, as standards in assays used to determine the concentration  
 CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule  
 CC capture probes for surface-enhanced laser desorption/ionisation, as  
 CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1  
 CC production, and in vaccines or for replacement therapy. The  
 CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a  
 CC disorder associated with the expression of hGDMPLP-1, in particular heart  
 CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.  
 CC The present sequence represents an oligomer used in the screening of the  
 CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.  
 CC The sequence data for this patent did not form part of the printed  
 CC specification, but was obtained in electronic format directly from WIPO  
 CC at ftp.wipo.int/pub/published\_pct\_sequence  
 XX

SQ Sequence 17 BP; 8 A; 3 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;  
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;  
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1013 CTGAAAAGAGGGGGAG 1029  
 ||||| ||||| |||||  
 Db 1 CTGAAAAGAGGCCAAG 17

RESULT 648  
 ABN10596/C  
 ID ABN10596 standard; DNA; 17 BP.  
 XX  
 AC ABN10596;  
 XX  
 DT 29-MAY-2002 (first entry)  
 XX  
 DE Human GDMPLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:10588.  
 XX  
 KW Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;  
 KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;  
 KW skeletal muscle disorder; amplicon; screening; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200192524-A2.  
 XX  
 PD 06-DEC-2001.  
 XX  
 PF 25-MAY-2001; 2001WO-US016981.  
 XX

26-MAY-2000; 2000US-0207456P.  
 PR 21-SEP-2000; 2000US-0234687P.  
 PR 27-SEP-2000; 2000US-0236359P.  
 PR 04-OCT-2000; 2000GB-00024263.  
 PR 30-JAN-2001; 2001WO-US000661.  
 PR 30-JAN-2001; 2001WO-US000662.  
 PR 30-JAN-2001; 2001WO-US000663.  
 PR 30-JAN-2001; 2001WO-US000664.  
 PR 30-JAN-2001; 2001WO-US000665.  
 XX

PR 30-JAN-2001; 2001WO-US000666.  
 PR 30-JAN-2001; 2001WO-US000667.  
 PR 30-JAN-2001; 2001WO-US000668.  
 PR 30-JAN-2001; 2001WO-US000669.  
 PR 30-JAN-2001; 2001WO-US000670.  
 PR 05-FEB-2001; 2001US-0266860P.  
 XX  
 PA (AEOM-) AEOMICA INC.  
 XX  
 PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;  
 XX  
 DR WPI; 2002-179446/23.  
 XX  
 XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,  
 PT or as specific biomolecule capture probes for surface-enhanced laser  
 PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.  
 PT  
 XX Disclosure; SEQ ID NO 10588; 214pp; English.  
 PS  
 XX The present invention describes a human genome-derived myosin-like  
 CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-  
 CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1  
 CC nucleic acids can be used as probes to detect, characterise and quantify  
 CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to  
 CC provide initial substrates for the recombinant engineering of hGDMPLP-1  
 CC protein variants having desired phenotypic improvements, and for  
 CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be  
 CC used as immunogens to raise antibodies that specifically recognise hGDMPLP  
 CC -1 proteins, as standards in assays used to determine the concentration  
 CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule  
 CC capture probes for surface-enhanced laser desorption ionisation, as  
 CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1  
 CC production, and in vaccines or for replacement therapy. The  
 CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a  
 CC disorder associated with the expression of hGDMPLP-1, in particular heart  
 CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.  
 CC The present sequence represents an oligomer used in the screening of the  
 CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.  
 CC The sequence data for this patent did not form part of the printed  
 CC specification, but was obtained in electronic format directly from WIPO  
 CC at ftp.wipo.int/pub/published\_pct\_sequence  
 XX  
 SQ Sequence 17 BP; 2 A; 6 C; 3 G; 6 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 12.2; DB 1; Length 17;  
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;  
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1022 AGGGGAGCTTGAGGA 1038  
 DB | | | | | | | | | | | | | | | | | | | | | |  
 17 AAGGGCAGCTTCAAGGA 1  
 RESULT 649  
 ABN06070/C  
 ID ABN06070 standard; DNA; 17 BP.  
 AC  
 XX ABN06070;  
 XX  
 DT 29-MAY-2002 (first entry)  
 XX  
 DE Human GDMPLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:6062.  
 XX Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;  
 KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;  
 KW skeletal muscle disorder; amplicon; screening; ss.  
 XX Homo sapiens.  
 OS  
 XX WO200192524-A2.  
 PN  
 XX 06-DEC-2001.  
 PD  
 XX

PF 25-MAY-2001; 2001WO-US016981.  
 XX  
 PR 26-MAY-2000; 2000US-0207456P.  
 PR 21-SEP-2000; 2000US-0234687P.  
 PR 27-SEP-2000; 2000US-0236359P.  
 PR 04-OCT-2000; 2000GB-00024263.  
 PR 30-JAN-2001; 2001WO-US000661.  
 PR 30-JAN-2001; 2001WO-US000662.  
 PR 30-JAN-2001; 2001WO-US000663.  
 PR 30-JAN-2001; 2001WO-US000664.  
 PR 30-JAN-2001; 2001WO-US000665.  
 PR 30-JAN-2001; 2001WO-US000666.  
 PR 30-JAN-2001; 2001WO-US000667.  
 PR 30-JAN-2001; 2001WO-US000668.  
 PR 30-JAN-2001; 2001WO-US000669.  
 PR 30-JAN-2001; 2001WO-US000670.  
 PR 05-FEB-2001; 2001US-0266860P.  
 XX  
 PA (AEOM-) AEOMICA INC.  
 XX  
 PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;  
 XX  
 DR WPI; 2002-179446/23.  
 XX  
 XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,  
 PT or as specific biomolecule capture probes for surface-enhanced laser  
 PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.  
 PT  
 XX Disclosure; SEQ ID NO 6062; 214pp; English.  
 PS  
 XX The present invention describes a human genome-derived myosin-like  
 CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-  
 CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1  
 CC nucleic acids can be used as probes to detect, characterise and quantify  
 CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to  
 CC provide initial substrates for the recombinant engineering of hGDMPLP-1  
 CC protein variants having desired phenotypic improvements, and for  
 CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be  
 CC used as immunogens to raise antibodies that specifically recognise hGDMPLP  
 CC -1 proteins, as standards in assays used to determine the concentration  
 CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule  
 CC capture probes for surface-enhanced laser desorption ionisation, as  
 CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1  
 CC production, and in vaccines or for replacement therapy. The  
 CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a  
 CC disorder associated with the expression of hGDMPLP-1, in particular heart  
 CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.  
 CC The present sequence represents an oligomer used in the screening of the  
 CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.  
 CC The sequence data for this patent did not form part of the printed  
 CC specification, but was obtained in electronic format directly from WIPO  
 CC at ftp.wipo.int/pub/published\_pct\_sequence  
 XX  
 SQ Sequence 17 BP; 4 A; 2 C; 9 G; 2 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 12.2; DB 1; Length 17;  
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;  
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1130 CCTTCACCTCCAGTCC 1146  
 DB | | | | | | | | | | | | | | | | | | | | | |  
 17 CCTTCAGTCCAGTCC 1  
 RESULT 650  
 ABN08403/C  
 ID ABN08403 standard; DNA; 17 BP.  
 AC  
 XX ABN08403;  
 XX  
 DT 29-MAY-2002 (first entry)  
 XX  
 DE Human GDMPLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:8395.





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CC at ftp.wipo.int/pub/published_pct_sequence
XX
SQ Sequence 17 BP; 6 A; 2 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred.No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1015 GAAAAAGAGGGGAGCT 1031
DB 1 GACAAAGAGGGGTCT 17

RESULT 652
ABN02688/c
ID ABN02688 standard; DNA; 17 BP.
AC ABN02688;
XX
XX 29-MAY-2002 (first entry)
XX
XX Human GDMPLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:2680.
XX
XX Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
XX muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
XX skeletal muscle disorder; amplicon; screening; ss.
XX
XX Homo sapiens.
XX
XX WO200192524-A2.
XX
XX 06-DEC-2001.
XX
XX 25-MAY-2001; 2001WO-US016981.
XX
XX 26-MAY-2000; 2000US-0207456P.
XX 21-SEP-2000; 2000US-0234687P.
XX 27-SEP-2000; 2000US-0236359P.
XX 04-OCT-2000; 2000GB-00024263.
XX 30-JAN-2001; 2001WO-US000661.
XX 30-JAN-2001; 2001WO-US000662.
XX 30-JAN-2001; 2001WO-US000663.
XX 30-JAN-2001; 2001WO-US000664.
XX 30-JAN-2001; 2001WO-US000665.
XX 30-JAN-2001; 2001WO-US000666.
XX 30-JAN-2001; 2001WO-US000667.
XX 30-JAN-2001; 2001WO-US000668.
XX 30-JAN-2001; 2001WO-US000669.
XX 05-FEB-2001; 2001US-0266860P.
XX
XX (ABOM-) ABOMICA INC.
XX
XX Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX WPI; 2002-179446/23.
XX
XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
XX or as specific biomolecule capture probes for surface-enhanced laser
XX desorption ionization, comprises human myosin-like protein hGDMPLP-1.
XX
XX Disclosure; SEQ ID NO 2680; 214pp; English.
XX
XX The present invention describes a human genome-derived myosin-like
XX protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
XX 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
XX nucleic acids can be used as probes to detect, characterise and quantify
XX hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
XX provide initial substrates for the recombinant engineering of hGDMPLP-1
XX protein variants having desired phenotypic improvements, and for
XX expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
XX used as immunogens to raise antibodies that specifically recognise hGDMPLP
XX -1 proteins, as standards in assays used to determine the concentration
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CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule
CC capture probes for surface-enhanced laser desorption ionisation, as
CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1
CC production, and in vaccines or for replacement therapy. The
CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
CC disorder associated with the expression of hGDMPLP-1, in particular heart
CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
CC The present sequence represents an oligomer used in the screening of the
CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence
XX
SQ Sequence 17 BP; 3 A; 4 C; 8 G; 2 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred.No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1172 ACTTTGGGCTCCCCGC 1188
DB 17 ACTTTGGGCTCCCCGC 1

RESULT 653
ABN08406/c
ID ABN08406 standard; DNA; 17 BP.
XX
XX AC ABN08406;
XX
XX 29-MAY-2002 (first entry)
XX
XX Human GDMPLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:8398.
XX
XX Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
XX muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
XX skeletal muscle disorder; amplicon; screening; ss.
XX
XX Homo sapiens.
XX
XX WO200192524-A2.
XX
XX 06-DEC-2001.
XX
XX 25-MAY-2001; 2001WO-US016981.
XX
XX 26-MAY-2000; 2000US-0207456P.
XX 21-SEP-2000; 2000US-0234687P.
XX 27-SEP-2000; 2000US-0236359P.
XX 04-OCT-2000; 2000GB-00024263.
XX 30-JAN-2001; 2001WO-US000661.
XX 30-JAN-2001; 2001WO-US000662.
XX 30-JAN-2001; 2001WO-US000663.
XX 30-JAN-2001; 2001WO-US000664.
XX 30-JAN-2001; 2001WO-US000665.
XX 30-JAN-2001; 2001WO-US000666.
XX 30-JAN-2001; 2001WO-US000667.
XX 30-JAN-2001; 2001WO-US000668.
XX 30-JAN-2001; 2001WO-US000669.
XX 05-FEB-2001; 2001US-0266860P.
XX
XX (ABOM-) ABOMICA INC.
XX
XX Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX WPI; 2002-179446/23.
XX
XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
XX or as specific biomolecule capture probes for surface-enhanced laser
XX desorption ionization, comprises human myosin-like protein hGDMPLP-1.
XX
XX Disclosure; SEQ ID NO 8398; 214pp; English.
XX
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XX CC The present invention describes a human genome-derived myosin-like  
 CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-  
 CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1  
 CC nucleic acids can be used as probes to detect, characterise and quantify  
 CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to  
 CC provide initial substrates for the recombinant engineering of hGDMPLP-1  
 CC protein variants having desired phenotypic improvements, and for  
 CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be  
 CC used as immunogens to raise antibodies that specifically recognise hGDMPLP  
 CC -1 proteins, as standards in assays used to determine the concentration  
 CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule  
 CC capture probes for surface-enhanced laser desorption/ionisation, as  
 CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1  
 CC production, and in vaccines or for replacement therapy. The  
 CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a  
 CC disorder associated with the expression of hGDMPLP-1, in particular heart  
 CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.  
 CC The present sequence represents an oligomer used in the screening of the  
 CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.  
 CC The sequence data for this patent did not form part of the printed  
 CC specification, but was obtained in electronic format directly from WIPO  
 CC at ftp.wipo.int/pub/published\_pct\_sequence  
 XX SQ Sequence 17 BP; 5 A; 2 C; 7 G; 3 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 12.2; DB 1; Length 17;  
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;  
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1095 CCCACCTGGCTTCA 1111  
 Db 17 CCTCACACTGGCTTCA 1  
 RESULT 654  
 ID ABN02041/c  
 XX ABN02041 standard; DNA; 17 BP.  
 AC ABN02041;  
 XX 29-MAY-2002 (first entry)  
 DT Human GDMPLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:2033.  
 DE  
 XX Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;  
 KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;  
 KW skeletal muscle disorder; amplicon; screening; ss.  
 XX Homo sapiens.  
 OS  
 XX WO200192524-A2.  
 PN 06-DEC-2001.  
 XX 25-MAY-2001; 2001WO-US016981.  
 PF 26-MAY-2000; 2000US-0207456P.  
 XX 21-SEP-2000; 2000US-0234687P.  
 PR 27-SEP-2000; 2000US-0236359P.  
 PR 04-OCT-2000; 2000GB-00024263.  
 PR 30-JAN-2001; 2001WO-US000661.  
 PR 30-JAN-2001; 2001WO-US000662.  
 PR 30-JAN-2001; 2001WO-US000663.  
 PR 30-JAN-2001; 2001WO-US000664.  
 PR 30-JAN-2001; 2001WO-US000665.  
 PR 30-JAN-2001; 2001WO-US000666.  
 PR 30-JAN-2001; 2001WO-US000667.  
 PR 30-JAN-2001; 2001WO-US000668.  
 PR 30-JAN-2001; 2001WO-US000669.  
 PR 05-FEB-2001; 2001WO-US000670.  
 XX 2001US-0266860P.

PA (ABOM-) ABOMICA INC.  
 XX Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;  
 XX WPI; 2002-179446/23.  
 XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,  
 PT or as specific biomolecule capture probes for surface-enhanced laser  
 PT desorption/ionisation, comprises human myosin-like protein hGDMPLP-1.  
 XX Disclosure; SEQ ID NO 2033; 214bp; English.  
 XX The present invention describes a human genome-derived myosin-like  
 CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-  
 CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1  
 CC nucleic acids can be used as probes to detect, characterise and quantify  
 CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to  
 CC provide initial substrates for the recombinant engineering of hGDMPLP-1  
 CC protein variants having desired phenotypic improvements, and for  
 CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be  
 CC used as immunogens to raise antibodies that specifically recognise hGDMPLP  
 CC -1 proteins, as standards in assays used to determine the concentration  
 CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule  
 CC capture probes for surface-enhanced laser desorption/ionisation, as  
 CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1  
 CC production, and in vaccines or for replacement therapy. The  
 CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a  
 CC disorder associated with the expression of hGDMPLP-1, in particular heart  
 CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.  
 CC The present sequence represents an oligomer used in the screening of the  
 CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.  
 CC The sequence data for this patent did not form part of the printed  
 CC specification, but was obtained in electronic format directly from WIPO  
 CC at ftp.wipo.int/pub/published\_pct\_sequence  
 XX SQ Sequence 17 BP; 3 A; 5 C; 7 G; 2 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 12.2; DB 1; Length 17;  
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;  
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 750 GTGCACCTGCCATGCAG 766  
 Db 17 GGGCACCTTCCCTGCAG 1  
 RESULT 655  
 ID ABK25912  
 XX ABK25912 standard; DNA; 17 BP.  
 AC ABK25912;  
 XX 09-APR-2002 (first entry)  
 DT Albino plant producing genome altering oligonucleotide #84.  
 XX Chromosomal genomic alteration; genome altering oligonucleotide; PCR; ss;  
 KW o-methyl modification; DNA modification; phosphorothioate linkage;  
 KW DNA repair; DNA alteration; environmental tolerance; hygromycin-B;  
 KW abiotic stress tolerance; improved nutritional value; hygromycin; primer;  
 KW amino acid over production; herbicide resistance; glyphosate resistance;  
 KW imidazolinone herbicide resistance; triazine resistance; disease resistance;  
 KW porphyrin herbicide resistance; modified starch production; waxy starch;  
 KW modified oil production; modified starch production; waxy starch;  
 KW altered floral morphology; male-sterile plant; albino mutant;  
 KW modified fatty acid content; reduced palmitic acid production; albino plant;  
 KW increased stearate production; reduced linolenic acid production;  
 KW photosynthetic process.  
 XX Triticum aestivum.  
 OS Synthetic.  
 XX WO200192512-A2.

XX 06-DEC-2001.  
 XX PD  
 XX PF  
 XX PP 01-JUN-2001; 2001WO-US017672.  
 XX PR  
 XX PP 01-JUN-2000; 2000US-0208538P.  
 XX PR 30-OCT-2000; 2000US-0244989P.  
 XX PR 27-MAR-2001; 2001US-00818875.  
 XX PA (UYDE ) UNIV DELAWARE.  
 XX PI  
 XX PP Kmiec EB, Gamper HB, Rice MC, Kim J;  
 XX WPI; 2002-106307/14.  
 XX DR  
 XX PP New oligonucleotides with modified nuclease-resistant termini, useful for  
 XX PT creating plants with desired phenotypes, e.g. stress tolerance, improved  
 XX PT nutritional value, herbicide or disease resistance, or modified oil  
 XX PT production.  
 XX PS Claim 7; Page 119; 220pp; English.  
 XX CC The invention relates to an oligonucleotide for targeted alteration of a  
 CC genetic sequence, which comprises a single-stranded oligonucleotide  
 CC having a DNA domain. The DNA domain has at least one mismatch with  
 CC respect to the genetic sequence to be altered and further comprises  
 CC chemical modifications of the oligonucleotide. The chemical modifications  
 CC consist of o-methyl modification, an LNA modification, two or more  
 CC phosphorothioate linkages on a terminus, or a combination of any two or  
 CC more of these modifications. The oligonucleotides are useful for  
 CC directing repair or alteration of plant genetic information. The  
 CC oligonucleotides are particularly useful for creating plants with desired  
 CC phenotypes, e.g. environmental or abiotic stress tolerance, improved  
 CC nutritional value (e.g. altering amino acid content of plants or  
 CC conferring amino acid over production), herbicide resistance (e.g.  
 CC glyphosate resistance, imidazolinone and sulphonylurea herbicide  
 CC resistance, porphyrin herbicide resistance or triazine resistance),  
 CC disease resistance, modified oil production, modified starch production  
 CC (e.g. increased starch or production of waxy starch), altered floral  
 CC morphology (e.g. male-sterile plants) or modified fatty acid content  
 CC (e.g. reduced palmitate, increased stearate or reduced linolenic acid).  
 CC The oligonucleotides are also useful for producing albino mutants for the  
 CC analysis of photosynthetic processes. This sequence represents a genome  
 CC altering oligonucleotide of the invention.  
 XX SQ Sequence 17 BP; 3 A; 7 C; 4 G; 3 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 12.2; DB 1; Length 17;  
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;  
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 869 CTGAGGACTCAGGCACC 885  
 DB 1 CTGAGGACTCAGTCGCC 17  
 RESULT 656  
 ID ABK25911/c  
 XX ABK25911 standard; DNA; 17 BP.  
 XX AC  
 XX DT 09-APR-2002 (first entry)  
 XX DE  
 XX DE Albino plant producing genome altering oligonucleotide #83.  
 XX KW Chromosomal genomic alteration; genome altering oligonucleotide; PCR; ss;  
 KW o-methyl modification; LNA modification; phosphorothioate linkage;  
 KW DNA repair; DNA alteration; environmental tolerance; hygromycin-B;  
 KW abiotic stress tolerance; improved nutritional value; hygromycin; primer;  
 KW amino acid over production; herbicide resistance; glyphosate resistance;  
 KW imidazolinone herbicide resistance; sulphonylurea herbicide resistance;  
 KW porphyrin herbicide resistance; triazine resistance; disease resistance;

KW modified oil production; modified starch production; waxy starch;  
 KW altered floral morphology; male-sterile plant; albino mutant;  
 KW modified fatty acid content; reduced palmitate production; albino plant;  
 KW increased stearate production; reduced linolenic acid production;  
 KW photosynthetic process.  
 OS Triticum aestivum.  
 OS Synthetic.  
 XX WO200192512-A2.  
 XX PD 06-DEC-2001.  
 XX PP 01-JUN-2001; 2001WO-US017672.  
 XX PR 01-JUN-2000; 2000US-0208538P.  
 XX PR 30-OCT-2000; 2000US-0244989P.  
 XX PR 27-MAR-2001; 2001US-00818875.  
 XX PA (UYDE ) UNIV DELAWARE.  
 XX PI  
 XX PP Kmiec EB, Gamper HB, Rice MC, Kim J;  
 XX WPI; 2002-106307/14.  
 XX DR  
 XX PP New oligonucleotides with modified nuclease-resistant termini, useful for  
 XX PT creating plants with desired phenotypes, e.g. stress tolerance, improved  
 XX PT nutritional value, herbicide or disease resistance, or modified oil  
 XX PT production.  
 XX PS Claim 7; Page 119; 220pp; English.  
 XX CC The invention relates to an oligonucleotide for targeted alteration of a  
 CC genetic sequence, which comprises a single-stranded oligonucleotide  
 CC having a DNA domain. The DNA domain has at least one mismatch with  
 CC respect to the genetic sequence to be altered and further comprises  
 CC chemical modifications of the oligonucleotide. The chemical modifications  
 CC consist of o-methyl modification, an LNA modification, two or more  
 CC phosphorothioate linkages on a terminus, or a combination of any two or  
 CC more of these modifications. The oligonucleotides are useful for  
 CC directing repair or alteration of plant genetic information. The  
 CC oligonucleotides are particularly useful for creating plants with desired  
 CC phenotypes, e.g. environmental or abiotic stress tolerance, improved  
 CC nutritional value (e.g. altering amino acid content of plants or  
 CC conferring amino acid over production), herbicide resistance (e.g.  
 CC glyphosate resistance, imidazolinone and sulphonylurea herbicide  
 CC resistance, porphyrin herbicide resistance or triazine resistance),  
 CC disease resistance, modified oil production, modified starch production  
 CC (e.g. increased starch or production of waxy starch), altered floral  
 CC morphology (e.g. male-sterile plants) or modified fatty acid content  
 CC (e.g. reduced palmitate, increased stearate or reduced linolenic acid).  
 CC The oligonucleotides are also useful for producing albino mutants for the  
 CC analysis of photosynthetic processes. This sequence represents a genome  
 CC altering oligonucleotide of the invention.  
 XX SQ Sequence 17 BP; 3 A; 7 C; 4 G; 3 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 12.2; DB 1; Length 17;  
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;  
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 869 CTGAGGACTCAGGCACC 885  
 DB 17 CTGAGGACTCAGTCGCC 1  
 RESULT 657  
 ID ABV80576/c  
 XX ABV80576 standard; DNA; 17 BP.  
 XX AC  
 XX DT 03-JAN-2003 (first entry)

XX DE Human HTPL scanning oligonucleotide SEQ ID 1822.  
 XX DE Human; Gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;  
 KW human testis expressed Patched like protein; testis; adrenal; liver;  
 KW male germ cell development; bone marrow; brain; kidney; lung; placenta;  
 KW prostate; skeletal muscle; colon; male infertility; cancer; ss.  
 XX OS Homo sapiens.  
 XX PN EPI229046-A2.  
 XX PD 07-AUG-2002.  
 XX PF 28-JAN-2002; 2002EP-00001167.  
 XX PR 30-JAN-2001; 2001WO-US000663.  
 XX PR 30-JAN-2001; 2001WO-US000664.  
 XX PR 30-JAN-2001; 2001WO-US000665.  
 XX PR 30-JAN-2001; 2001WO-US000667.  
 XX PR 30-JAN-2001; 2001WO-US000668.  
 XX PR 23-MAY-2001; 2001US-00864761.  
 XX PR 09-OCT-2001; 2001US-0327898P.  
 XX PA (ABOM-) AEOMICA INC.  
 XX PI Zhan J;  
 XX PI WPI; 2002-676582/73.  
 XX DR Novel isolated human testis expressed Patched like protein (HTPL), useful  
 PT for identifying agonist and antagonist and specific binding partners, and  
 PT for treating subjects having defects in HTPL.  
 XX PS Example 2; Page 302; 718pp; English.  
 XX CC The present invention relates to human testis expressed Patched like  
 CC protein (HTPL, see ABV78759 to ABV78762 and ABV98519 to ABV98520). HTPL  
 CC has two isoforms, with a few single base pair differences between the  
 CC two. One of the single base pair changes introduces a premature stop  
 CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL  
 CC shares an overall structure organisation with the Patched protein. The  
 CC shared structural features strongly imply that HTPL plays a role similar  
 CC to that of Patched, and is a potential tumour suppressor. HTPL is  
 CC important in regulating male germ cell development, and the HTPL gene was  
 CC mapped to human chromosome 10p12.1. HTPL and its coding sequence are  
 CC useful for diagnosing a disorder caused by mutation in HTPL, and in  
 CC therapy and manufacture of a medicament for treatment or prevention of  
 CC such disorder associated with decreased expression or activity of human  
 CC HTPL. Such disorders include disorders of testis, or adrenal, adult and  
 CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,  
 CC skeletal muscle or colon function. HTPL proteins and nucleic acids are  
 CC clinically useful diagnostic markers and potential therapeutic agents for  
 CC male infertility and cancer. The present oligonucleotide was used in an  
 CC example from the invention  
 XX SQ Sequence 17 BP; 7 A; 2 C; 5 G; 3 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 12.2; DB 1; Length 17;  
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;  
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1122 CAGTTCACCTTCACCT 1138  
 |||||  
 17 CAGTTCACCTTCATCT 1  
 Db  
 RESULT 658  
 ABK18988  
 ID ABK18988 standard; RNA; 17 BP.  
 XX  
 AC ABK18988;

XX DT 09-APR-2002 (first entry)  
 XX DE Human ERG DNzyme target sequence Seq ID No 1635.  
 XX DE Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;  
 KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;  
 KW vulnary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;  
 KW tumour angiogenesis; diabetic retinopathy; macular degeneration;  
 KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;  
 KW angiofibroma of tuberosus sclerosis; port-wine stain; wound healing;  
 KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;  
 KW Osler-Weber-rendu syndrome; leukaemia; osteoporosis; DNzyme; inozyme;  
 KW ambrzyme.  
 XX OS Homo sapiens.  
 XX PN WO200188124-A2.  
 XX PD 22-NOV-2001.  
 XX PF 16-MAY-2001; 2001WO-US015866.  
 XX PR 16-MAY-2000; 2000US-00572021.  
 XX PR (RIBO-) RIBOZYME PHARM INC.  
 XX PA (GLAXO) GLAXO GROUP LTD.  
 XX PI Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;  
 XX PI WPI; 2002-082995/11.  
 XX DR Novel polynucleotide which down regulates expression of Ets-related gene,  
 PT useful for treating cancer, diabetic retinopathy, macular degeneration,  
 PT arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.  
 XX PS Claim 4; Page 106; 149pp; English.  
 XX CC The invention relates to a nucleic acid molecule (I) which down regulates  
 CC expression of an Ets-related gene (ERG). (I) is useful for treating  
 CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,  
 CC tumour angiogenesis, diabetic retinopathy, macular degeneration,  
 CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca  
 CC vulgaris, angiofibroma of tuberosus sclerosis, port-wine stains, Sturge  
 CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu  
 CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for  
 CC treating a patient having a condition associated with the level of ERG,  
 CC by contacting cells of the patient with (I) under conditions suitable for  
 CC the treatment. The method comprises the use of one or more therapies  
 CC under conditions suitable for the treatment. Leukaemia or tumour  
 CC angiogenesis is treated by administering (I) to the patient in  
 CC chemotherapy with one or more of other therapies such as radiation or  
 CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of  
 CC ERG gene, by contacting (I) with RNA, in the presence of a divalent  
 CC cation such as Mg<sup>2+</sup>. (I) is useful for diagnosis of conditions and  
 CC diseases related to the expression of ERG, and as diagnostic tool to  
 CC examine genetic drift and mutations within diseased cells or to detect  
 CC the presence of ERG RNA in a cell. (I) is useful for specifically  
 CC targeting genes that share homology with ERG gene or ERG fusion genes.  
 CC ABK17354-ABK2719 represent nucleic acids, including antisense and  
 CC enzymatic nucleic acid molecules which regulate expression of ERG, and  
 CC related PCR primers of the invention  
 XX SQ Sequence 17 BP; 4 A; 8 C; 2 G; 0 T; 3 U; 0 Other;  
 Query Match 0.6%; Score 12.2; DB 1; Length 17;  
 Best Local Similarity 64.7%; Pred. No. 5.9e+02;  
 Matches 11; Conservative 3; Mismatches 3; Indels 0; Gaps 0;  
 QY 1128 CACCTTCACCTTCACCT 1144  
 |||||  
 1 CAGCCUCCACUCGACGU 17  
 Db

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RESULT 659
ABK17499
ID ABK17499 standard; RNA; 17 BP.
XX AC
XX AC ABK17499;
XX DT
XX DT 09-APR-2002 (first entry)
XX DE
XX DE Human ERG hammerhead ribozyme target sequence, Seq ID No 146.
XX KW
XX KW Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
XX KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;
XX KW vulvar; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
XX KW tumour angiogenesis; diabetic retinopathy; macular degeneration;
XX KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
XX KW angiofibroma of tuberosus sclerosus; port-wine stain; wound healing;
XX KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;
XX KW Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme;
XX KW amberzyme.
XX OS Homo sapiens.
XX FN WO200198124-A2.
XX XX
XX PD 22-NOV-2001.
XX PF
XX PF 16-MAY-2001; 2001WO-US015866.
XX PR
XX PR 16-MAY-2000; 2000US-00572021.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PA (GLAX) GLAXO GROUP LTD.
XX PI
XX PI Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;
XX DR WPI; 2002-082995/11.
XX PT
XX PT Novel polynucleotide which down regulates expression of Ets-related gene,
XX PT useful for treating cancer, diabetic retinopathy, macular degeneration,
XX PT arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
XX PS
XX PS Claim 4; Page 61; 149pp; English.
XX CC
XX CC The invention relates to a nucleic acid molecule (I) which down regulates
XX CC expression of an Ets-related gene (ERG). (I) is useful for treating
XX CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
XX CC tumour angiogenesis, diabetic retinopathy, macular degeneration,
XX CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca
XX CC vulgaris, angiofibroma of tuberosus sclerosus, port-wine stains, Sturge
XX CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu
XX CC treating a patient having a condition associated with the level of ERG,
XX CC by contacting cells of the patient with (I) under conditions suitable for
XX CC under conditions suitable for the treatment. Leukaemia or tumour
XX CC angiogenesis is treated by administering (I) to the patient in
XX CC conjunction with one or more of other therapies such as radiation or
XX CC chemotherapy treatment. (I) is useful for reducing ERG activity in a
XX CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
XX CC ERG gene, by contacting (I) with RNA, in the presence of a divalent
XX CC cation such as Mg2+. (I) is useful for diagnosis of conditions and
XX CC diseases related to the expression of ERG, and as diagnostic tool to
XX CC examine genetic drift and mutations within diseased cells or to detect
XX CC the presence of ERG RNA in a cell. (I) is useful for specifically
XX CC targeting genes that share homology with ERG gene or ERG fusion genes.
XX CC ABK17354-ABK22719 represent nucleic acids, including antisense and
XX CC enzymatic nucleic acid molecules which regulate expression of ERG, and
XX CC related PCR primers of the invention
XX SQ
Sequence 17 BP; 4 A; 8 C; 2 G; 0 T; 3 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 64.7%; Pred. No. 5.9e+02;
Matches 11; Conservative 3; Mismatches 3; Indels 0; Gaps 0;

QY 1131 CTTCACTCCAGTCCA 1147
| : | : | : | : | : | : |
Db 1 CUCCAGUCCAGCUGCA 17

RESULT 660
ABK18610
ID ABK18610 standard; RNA; 17 BP.
XX AC
XX AC ABK18610;
XX DT
XX DT 09-APR-2002 (first entry)
XX DE
XX DE Human ERG G-cleaver ribozyme target sequence Seq ID No 1257.
XX KW
XX KW Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
XX KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;
XX KW vulvar; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
XX KW tumour angiogenesis; diabetic retinopathy; macular degeneration;
XX KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
XX KW angiofibroma of tuberosus sclerosus; port-wine stain; wound healing;
XX KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;
XX KW Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme;
XX KW amberzyme.
XX OS Homo sapiens.
XX FN WO200198124-A2.
XX XX
XX PD 22-NOV-2001.
XX PF
XX PF 16-MAY-2001; 2001WO-US015866.
XX PR
XX PR 16-MAY-2000; 2000US-00572021.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PA (GLAX) GLAXO GROUP LTD.
XX PI
XX PI Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;
XX DR WPI; 2002-082995/11.
XX PT
XX PT Novel polynucleotide which down regulates expression of Ets-related gene,
XX PT useful for treating cancer, diabetic retinopathy, macular degeneration,
XX PT arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
XX PS
XX PS Claim 4; Page 83; 149pp; English.
XX CC
XX CC The invention relates to a nucleic acid molecule (I) which down regulates
XX CC expression of an Ets-related gene (ERG). (I) is useful for treating
XX CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
XX CC tumour angiogenesis, diabetic retinopathy, macular degeneration,
XX CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca
XX CC vulgaris, angiofibroma of tuberosus sclerosus, port-wine stains, Sturge
XX CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu
XX CC treating a patient having a condition associated with the level of ERG,
XX CC by contacting cells of the patient with (I) under conditions suitable for
XX CC under conditions suitable for the treatment. Leukaemia or tumour
XX CC angiogenesis is treated by administering (I) to the patient in
XX CC conjunction with one or more of other therapies such as radiation or
XX CC chemotherapy treatment. (I) is useful for reducing ERG activity in a
XX CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
XX CC ERG gene, by contacting (I) with RNA, in the presence of a divalent
XX CC cation such as Mg2+. (I) is useful for diagnosis of conditions and
XX CC diseases related to the expression of ERG, and as diagnostic tool to
XX CC examine genetic drift and mutations within diseased cells or to detect
XX CC the presence of ERG RNA in a cell. (I) is useful for specifically

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targeting genes that share homology with ERG gene or ERG fusion genes.  
 CC ABK17354-ABK22719 represent nucleic acids, including antisense and  
 CC enzymatic nucleic acid molecules which regulate expression of ERG, and  
 CC related PCR primers of the invention  
 XX  
 SQ Sequence 17 BP; 6 A; 8 C; 2 G; 0 T; 1 U; 0 Other;  
 Query Match 0.6%; Score 12.2; DB 1; Length 17;  
 Best Local Similarity 76.5%; Pred. No. 5.9e+02;  
 Matches 13; Conservative 1; Mismatches 3; Indels 0; Gaps 0;  
 QY 1049 AGCCCTGGCCCAAC 1065  
 ||||| : ||| |||||  
 Db 1 AGCCCAUGCCCAAC 17  
 RESULT 661  
 ABK18825  
 ID ABK18825 standard; RNA; 17 BP.  
 XX  
 AC ABK18825;  
 XX  
 DT 09-APR-2002 (first entry)  
 XX  
 DE Human ERG DNAzyme target sequence Seq ID No 1472.  
 XX  
 KW Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;  
 KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;  
 KW vulnery; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;  
 KW tumour angiogenesis; diabetic retinopathy; macular degeneration;  
 KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;  
 KW angiofibroma of tuberous sclerosis; port-wine stain; wound healing;  
 KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;  
 KW Osler-Weber-rendu syndrome; leukaemia; osteoporosis; DNAzyme; inozyme;  
 KW amberzyme.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200188124-A2.  
 XX  
 PD 22-NOV-2001.  
 XX  
 PF 16-MAY-2001; 2001WO-US015866.  
 XX  
 PR 16-MAY-2000; 2000US-00572021.  
 XX  
 PA (RISO-) RIBOZYME PHARM INC.  
 PA (GLAX) GLAXO GROUP LTD.  
 XX  
 PI Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;  
 XX  
 DR WPI; 2002-082995/11.  
 XX  
 PT Novel polynucleotide which down regulates expression of Ets-related gene,  
 PT useful for treating cancer, diabetic retinopathy, macular degeneration,  
 PT arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.  
 XX  
 PS Claim 4; Page 92; 149pp; English.  
 XX  
 CC The invention relates to a nucleic acid molecule (I) which down regulates  
 CC expression of an Ets-related gene (ERG). (I) is useful for treating  
 CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,  
 CC tumour angiogenesis, diabetic retinopathy, macular degeneration,  
 CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca  
 CC vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge  
 CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu  
 CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for  
 CC treating a patient having a condition associated with the level of ERG,  
 CC by contacting cells of the patient with (I) under conditions suitable for  
 CC the treatment. The method comprises the use of one or more therapies  
 CC under conditions suitable for the treatment. Leukaemia or tumour  
 CC angiogenesis is treated by administering (I) to the patient in  
 CC conjunction with one or more of other therapies such as radiation or

chemotherapy treatment. (I) is useful for reducing ERG activity in a  
 CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of  
 CC ERG gene, by contacting (I) with RNA, in the presence of a divalent  
 CC cation such as Mg2+. (I) is useful for diagnosis of conditions and  
 CC diseases related to the expression of ERG, and as diagnostic tool to  
 CC examine genetic drift and mutations within diseased cells or to detect  
 CC the presence of ERG RNA in a cell. (I) is useful for specifically  
 CC targeting genes that share homology with ERG gene or ERG fusion genes.  
 CC ABK17354-ABK22719 represent nucleic acids, including antisense and  
 CC enzymatic nucleic acid molecules which regulate expression of ERG, and  
 CC related PCR primers of the invention  
 XX  
 SQ Sequence 17 BP; 2 A; 7 C; 4 G; 0 T; 4 U; 0 Other;  
 Query Match 0.6%; Score 12.2; DB 1; Length 17;  
 Best Local Similarity 64.7%; Pred. No. 5.9e+02;  
 Matches 11; Conservative 3; Mismatches 3; Indels 0; Gaps 0;  
 QY 1172 ACTTTGGCGCTCCCGC 1188  
 ||::: ||| |||||  
 Db 1 ACUUUGGCGGCCAC 17  
 RESULT 662  
 ABK18986  
 ID ABK18986 standard; RNA; 17 BP.  
 XX  
 AC ABK18986;  
 XX  
 DT 09-APR-2002 (first entry)  
 XX  
 DE Human ERG DNAzyme target sequence Seq ID No 1633.  
 XX  
 KW Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;  
 KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;  
 KW tumour angiogenesis; diabetic retinopathy; macular degeneration;  
 KW vulnery; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;  
 KW tumour angiogenesis; diabetic retinopathy; macular degeneration;  
 KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;  
 KW angiofibroma of tuberous sclerosis; port-wine stain; wound healing;  
 KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;  
 KW Osler-Weber-rendu syndrome; leukaemia; osteoporosis; DNAzyme; inozyme;  
 KW amberzyme.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200188124-A2.  
 XX  
 PD 22-NOV-2001.  
 XX  
 PF 16-MAY-2001; 2001WO-US015866.  
 XX  
 PR 16-MAY-2000; 2000US-00572021.  
 XX  
 PA (RISO-) RIBOZYME PHARM INC.  
 PA (GLAX) GLAXO GROUP LTD.  
 XX  
 PI Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;  
 XX  
 DR WPI; 2002-082995/11.  
 XX  
 PT Novel polynucleotide which down regulates expression of Ets-related gene,  
 PT useful for treating cancer, diabetic retinopathy, macular degeneration,  
 PT arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.  
 XX  
 PS Claim 4; Page 106; 149pp; English.  
 XX  
 CC The invention relates to a nucleic acid molecule (I) which down regulates  
 CC expression of an Ets-related gene (ERG). (I) is useful for treating  
 CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,  
 CC tumour angiogenesis, diabetic retinopathy, macular degeneration,  
 CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca  
 CC vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge  
 CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu

CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for  
 CC treating a patient having a condition associated with the level of ERG.  
 CC by contacting cells of the patient with (I) under conditions suitable for  
 CC the treatment. The method comprises the use of one or more therapies  
 CC under conditions suitable for the treatment. Leukaemia or tumour  
 CC angiogenesis is treated by administering (I) to the patient in  
 CC conjunction with one or more of other therapies such as radiation or  
 CC chemotherapy treatment. (I) is useful for reducing ERG activity in a  
 CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of  
 CC ERG gene, by contacting (I) with RNA, in the presence of a divalent  
 CC cation such as Mg<sup>2+</sup>. (I) is useful for diagnosis of conditions and  
 CC diseases related to the expression of ERG, and as diagnostic tool to  
 CC examine genetic drift and mutations within diseased cells or to detect  
 CC the presence of ERG RNA in a cell. (I) is useful for specifically  
 CC targeting genes that share homology with ERG gene or ERG fusion genes.  
 CC ABK17354-ABK22719 represent nucleic acids, including antisense and  
 CC enzymatic nucleic acid molecules which regulate expression of ERG, and  
 CC related PCR primers of the invention  
 XX  
 SQ Sequence 17 BP; 3 A; 5 C; 5 G; 0 T; 4 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;  
 Best Local Similarity 58.8%; Pred. No. 5.9e+02;

Matches 10; Conservative 4; Mismatches 3; Indels 0; Gaps 0;

QY 1117 GTGCCAGTCCACCTT 1133

DB 1 GUGGCCAGACGAGCUU 17

RESULT 663

ABK18190

ID ABK18190 standard; RNA; 17 BP.

AC ABK18190;

DT 09-APR-2002 (first entry)

DE Human ERG hammerhead ribozyme target sequence, Seq ID No 837.

XX Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;  
 KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;  
 KW vulnery; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;  
 KW tumour angiogenesis; diabetic retinopathy; macular degeneration;  
 KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;  
 KW angiofibroma of tuberosus sclerosis; port-wine stain; wound healing;  
 KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;  
 KW Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme;  
 KW amberzyme.

OS Homo sapiens.

XX WO200188124-A2.

PN 22-NOV-2001.

XX 16-MAY-2001; 2001WO-US015866.

XX 16-MAY-2000; 2000US-00572021.

XX (RIBO-) RIBOZYME PHARM INC.  
 PA (GLAX) GLAXO GROUP LTD.

PI Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;

XX WPI; 2002-082995/11.

XX Novel polynucleotide which down regulates expression of Ets-related gene,  
 PT useful for treating cancer, diabetic retinopathy, macular degeneration,  
 PT arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.

XX Claim 4; Page 74; 149pp; English.

CC The invention relates to a nucleic acid molecule (I) which down regulates  
 CC expression of an Ets-related gene (ERG). (I) is useful for treating  
 CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,  
 CC tumour angiogenesis, diabetic retinopathy, macular degeneration,  
 CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca  
 CC vulgaris, angiofibroma of tuberosus sclerosis, port-wine stains, Sturge  
 CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu  
 CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for  
 CC treating a patient having a condition associated with the level of ERG,  
 CC by contacting cells of the patient with (I) under conditions suitable for  
 CC the treatment. The method comprises the use of one or more therapies  
 CC under conditions suitable for the treatment. Leukaemia or tumour  
 CC angiogenesis is treated by administering (I) to the patient in  
 CC conjunction with one or more of other therapies such as radiation or  
 CC chemotherapy treatment. (I) is useful for reducing ERG activity in a  
 CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of  
 CC ERG gene, by contacting (I) with RNA, in the presence of a divalent  
 CC cation such as Mg<sup>2+</sup>. (I) is useful for diagnosis of conditions and  
 CC diseases related to the expression of ERG, and as diagnostic tool to  
 CC examine genetic drift and mutations within diseased cells or to detect  
 CC the presence of ERG RNA in a cell. (I) is useful for specifically  
 CC targeting genes that share homology with ERG gene or ERG fusion genes.  
 CC ABK17354-ABK22719 represent nucleic acids, including antisense and  
 CC enzymatic nucleic acid molecules which regulate expression of ERG, and  
 CC related PCR primers of the invention  
 XX  
 SQ Sequence 17 BP; 2 A; 13 C; 1 G; 0 T; 1 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;  
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;

Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1251 CCCCATCCCCACCCCC 1267

DB 1 CUCCAGCCCCACCCCC 17

RESULT 664

ABK18580/c

ID ABK18580 standard; RNA; 17 BP.

AC ABK18580;

DT 09-APR-2002 (first entry)

DE Human ERG G-cleaver ribozyme target sequence Seq ID No 1227.

XX Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;  
 KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;  
 KW vulnery; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;  
 KW tumour angiogenesis; diabetic retinopathy; macular degeneration;  
 KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;  
 KW angiofibroma of tuberosus sclerosis; port-wine stain; wound healing;  
 KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;  
 KW Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme;  
 KW amberzyme.

OS Homo sapiens.

XX WO200188124-A2.

PN 22-NOV-2001.

XX 16-MAY-2001; 2001WO-US015866.

XX 16-MAY-2000; 2000US-00572021.

XX (RIBO-) RIBOZYME PHARM INC.  
 PA (GLAX) GLAXO GROUP LTD.

PI Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;

XX WPI; 2002-082995/11.



XX Novel polynucleotide which down regulates expression of Ets-related gene,  
 PT useful for treating cancer, diabetic retinopathy, macular degeneration,  
 PT arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.  
 XX  
 PS Claim 4; Page 82; 149pp; English.

XX The invention relates to a nucleic acid molecule (I) which down regulates  
 CC expression of an Ets-related gene (ERG). (I) is useful for treating  
 CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,  
 CC tumour angiogenesis, diabetic retinopathy, macular degeneration,  
 CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca  
 CC vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge  
 CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu  
 CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for  
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 CC by contacting cells of the patient with (I) under conditions suitable for  
 CC the treatment. The method comprises the use of one or more therapies  
 CC under conditions suitable for the treatment. Leukaemia or tumour  
 CC angiogenesis is treated by administering (I) to the patient in  
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 CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of  
 CC cation such as Mg<sup>2+</sup>. (I) is useful for diagnosis of conditions and  
 CC diseases related to the expression of ERG, and as diagnostic tool to  
 CC examine genetic drift and mutations within diseased cells or to detect  
 CC the presence of ERG RNA in a cell. (I) is useful for specifically  
 CC targeting genes that share homology with ERG gene or ERG fusion genes.  
 CC ABK17354-ABK22719 represent nucleic acids, including antisense and  
 CC enzymatic nucleic acid molecules which regulate expression of ERG, and  
 CC related PCR primers of the invention  
 XX  
 SQ Sequence 17 BP; 6 A; 7 C; 2 G; 0 T; 2 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;  
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;  
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 859 GTTAAAGGCGACTGAGGA 875  
 ||| ||||| ||||| |||||  
 DB 17 GTTTGGGCACTGTGGA 1

RESULT 665  
 ABK18023  
 ID ABK18023 standard; RNA; 17 BP.  
 AC ABK18023;  
 XX  
 DT 09-APR-2002 (first entry)  
 XX  
 DE Human ERG hammerhead ribozyme target sequence, Seq ID No 670.  
 XX  
 KW Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;  
 KW ophthalmological; aneurysmal; antipsoriatic; virucide; osteoporosis;  
 KW vulvar; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;  
 KW tumour angiogenesis; diabetic retinopathy; macular degeneration;  
 KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;  
 KW angiofibroma of tuberous sclerosis; port-wine stain; wound healing;  
 KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;  
 KW Osler-Weber-rendu syndrome; leukaemia; osteoporosis; DNase; inozyme;  
 KW amberzyme.  
 OS Homo sapiens.  
 XX  
 EN WO2001188124-A2.  
 XX  
 PD 22-NOV-2001.  
 XX  
 PF 16-MAY-2001; 2001WO-US015866.  
 XX  
 XX 16-MAY-2000; 2000US-00572021.  
 PR

XX  
 PA  
 PA  
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 PI  
 XX  
 XX  
 DR  
 XX

(RIBO-) RIBOZYME PHARM INC.  
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Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;  
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 PT arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.  
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 PS Claim 4; Page 71; 149pp; English.

XX The invention relates to a nucleic acid molecule (I) which down regulates  
 CC expression of an Ets-related gene (ERG). (I) is useful for treating  
 CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,  
 CC tumour angiogenesis, diabetic retinopathy, macular degeneration,  
 CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca  
 CC vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge  
 CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu  
 CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for  
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 CC by contacting cells of the patient with (I) under conditions suitable for  
 CC the treatment. The method comprises the use of one or more therapies  
 CC under conditions suitable for the treatment. Leukaemia or tumour  
 CC angiogenesis is treated by administering (I) to the patient in  
 CC conjunction with one or more of other therapies such as radiation or  
 CC chemotherapy treatment. (I) is useful for reducing ERG activity in a  
 CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of  
 CC ERG gene, by contacting (I) with RNA, in the presence of a divalent  
 CC cation such as Mg<sup>2+</sup>. (I) is useful for diagnosis of conditions and  
 CC diseases related to the expression of ERG, and as diagnostic tool to  
 CC examine genetic drift and mutations within diseased cells or to detect  
 CC the presence of ERG RNA in a cell. (I) is useful for specifically  
 CC targeting genes that share homology with ERG gene or ERG fusion genes.  
 CC ABK17354-ABK22719 represent nucleic acids, including antisense and  
 CC enzymatic nucleic acid molecules which regulate expression of ERG, and  
 CC related PCR primers of the invention  
 XX  
 SQ Sequence 17 BP; 5 A; 9 C; 1 G; 0 T; 2 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;  
 Best Local Similarity 70.6%; Pred. No. 5.9e+02;  
 Matches 12; Conservative 2; Mismatches 3; Indels 0; Gaps 0;  
 QY 1133 TCACCTCCAGCTCCACC 1149  
 :||| ||||| :|||  
 DB 1 UCACCCCGAGCAAC 17

RESULT 666  
 AAD27399  
 ID AAD27399 standard; DNA; 17 BP.

AC AAD27399;  
 XX

DT 18-APR-2002 (first entry)  
 XX

DE Human tumour necrosis factor (-308) DNA amplifying probe 1.  
 XX

KW Human; interleukin-1; inflammatory disorder; coronary artery disease;  
 KW periodontal disease; Alzheimer's disease; atherosclerosis; osteoporosis;  
 KW immune response; insulin-dependent diabetes; diabetic retinopathy;  
 KW renal disease; diabetic nephropathy; hepatic fibrosis; alopecia areata;  
 KW Graves disease; Graves ophthalmopathy; systemic lupus erythematosus;  
 KW extrathyroid disease; lichen sclerosis; juvenile chronic arthritis;  
 KW rheumatoid arthritis; gastric cancer; ulcerative colitis; asthma;  
 KW interstitial lung disease; idiopathic pulmonary fibrosis; sepsis;  
 KW multiple sclerosis; acne; cardiac; dermatological; neuroprotective;  
 KW neotropic; osteopathic; ophthalmological; tumour necrosis factor; TNF;  
 KW probe; ss.  
 XX



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OS Homo sapiens.
XX
XX Key Location/Qualifiers
FH modified_base 1
FT /*tag= a
FT /mod_base= OTHER
FT /note= "TET labelled adenosine"
FT 17
FT modified_base
FT /*tag= b
FT /mod_base= OTHER
FT /note= "TAMRA labelled cytosine"
XX
XX WO200200933-A2.
XX
XX 03-JAN-2002.
XX
XX 22-JUN-2001; 2001WO-US020079.
XX
XX 23-JUN-2000; 2000US-0213853P.
XX
XX (INTE-) INTERLEUKIN GENETICS INC.
XX
XX Duff GW, Kornman KS;
XX
XX WPI; 2002-139934/18.
XX
XX Screening a substance in a subject for modulating an immune response,
XX comprises genotyping to identify the test subject, and observing a
XX biomarker before and after contacting the subject with the test
XX substance.
XX
XX Example; Page 43; 54pp; English.
XX
XX The present invention relates to methods for identifying a test substance
XX that modulate the immune response in a genotype specific manner. Methods
XX of the invention involve genotyping subjects to identify those having a
XX genotype (e.g. interleukin-1; IL-1) associated with one or more
XX inflammatory disorder. The method comprises genotyping a subject having
XX an inflammatory disease-associated genotype and observing a biomarker in
XX the subject before and after the subject is contacted with the test
XX substance. The methods or cells associated with inflammatory diseases are
XX useful for identifying a substance that is likely to prevent or diminish
XX a specific biological response in subjects having inflammatory disease-
XX associated genotype, where the genotype is associated a pre-disposition
XX to one or more of periodontal disease, coronary artery disease
XX Alzheimer's disease, atherosclerosis, osteoporosis, insulin-dependent
XX diabetes, diabetic retinopathy, end-stage renal disease, diabetic
XX nephropathy, hepatic fibrosis, alopecia areata, Graves disease, Graves
XX ophthalmopathy, extrathyroid disease, systemic lupus erythematosus,
XX lichen sclerosis, rheumatoid arthritis, juvenile chronic arthritis,
XX gastric cancer, ulcerative colitis, asthma, interstitial lung disease,
XX multiple sclerosis, idiopathic pulmonary fibrosis, sepsis and acne. The
XX invention also relates to a kit comprising primers for the identification
XX of one or more IL-1 polymorphism. The present sequence is a probe which
XX is used for amplifying tumour necrosis factor (TNF; -308) DNA. This probe
XX is used in the exemplification of the invention
XX
XX Sequence 17 BP; 2 A; 11 C; 2 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 12.2; DB 1; Length 17;
XX Best Local Similarity 82.4%; Pred. No. 5.9e+02;
XX Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 1250 ACCCCATCCCAACCC 1265
XX ||||| ||||| |||||
XX Db 1 ACCCGTCCCATGCC 17
XX
XX RESULT 667
XX ABS74941
XX ID ABS74941 standard; DNA; 17 BP.
XX
XX AC ABS74941;

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XX 24-DEC-2002 (first entry)
XX
XX Human PAPP-Ea associated 17-mer SEQ ID 467.
XX
XX PAPP-E; human; pregnancy associated plasma protein E; abortive;
XX contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis;
XX dysgenetic pregnancy; primer; ss.
XX
XX Homo sapiens.
XX
XX US2002102252-A1.
XX
XX 01-AUG-2002.
XX
XX 06-APR-2001; 2001US-00827998.
XX
XX 26-MAY-2000; 2000US-0207456P.
XX
XX (GUY/) GU Y.
XX (SHAN/) SHANNON M E.
XX
XX Gu Y, Shannon ME;
XX
XX WPI; 2002-697817/75.
XX
XX New isolated nucleic acid encoding an isoform of human pregnancy
XX associated plasma protein E, for preventing or aborting pregnancy.
XX
XX Example 2; Page 136; 353pp; English.
XX
XX This invention describes a novel isolated nucleic acid that encodes one
XX of three new isoforms of human pregnancy associated plasma protein E,
XX hPAPP-E. The products of the invention have abortive and contraceptive
XX activity and can be used for gene therapy or in a vaccine. The nucleic
XX acid, polypeptide encoded by it, or antibody to the polypeptide can be
XX used in pharmaceutical compositions or vaccines for preventing or
XX aborting pregnancy. PAPP-E is used in the antenatal diagnosis of
XX dysgenetic pregnancies. The nucleic acids are used as probes to assess
XX the level of PAPP-E isoform mRNA in chorionic villus samples, and the
XX antibodies can be used to assess the expression levels of PAPP-E isoform
XX proteins in chorionic villus samples, to diagnose dysgenetic pregnancies
XX antenatally. This sequence represents an oligomer used in scanning the
XX human PAPP-E genes described in the disclosure of the invention
XX
XX Sequence 17 BP; 6 A; 1 C; 9 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 12.2; DB 1; Length 17;
XX Best Local Similarity 82.4%; Pred. No. 5.9e+02;
XX Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 1013 CTGAAGAAGAGGGGGAG 1029
XX ||||| ||||| |||||
XX Db 1 CTGAAGAAGAGGGGGG 17
XX
XX RESULT 668
XX ABV90456/c
XX ID ABV90456 standard; DNA; 17 BP.
XX
XX AC ABV90456;
XX
XX 23-DEC-2002 (first entry)
XX
XX Human POSHL1 scanning oligonucleotide SEQ ID NO 1169.
XX
XX Human; POSHL1; SH3 domain; POSH-like signalling protein 1; oncogene;
XX Rho GTPase; signal transduction; gene expression; cancer; vaccine;
XX gene therapy; transgenic; ss.
XX
XX Homo sapiens.
XX
XX EP1239051-A2.

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KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;  
 KW gene therapy; transgenic; ss.  
 XX Homo sapiens.  
 OS  
 XX  
 PN EP1239051-A2.  
 XX  
 XX  
 PD 11-SEP-2002.  
 XX  
 XX 28-JAN-2002; 2002EP-00001165.  
 PF  
 XX 30-JAN-2001; 2001WO-US000663.  
 PR  
 XX 30-JAN-2001; 2001WO-US000664.  
 PR  
 XX 30-JAN-2001; 2001WO-US000665.  
 PR  
 XX 30-JAN-2001; 2001WO-US000666.  
 PR  
 XX 30-JAN-2001; 2001WO-US000667.  
 PR  
 XX 30-JAN-2001; 2001WO-US000668.  
 PR  
 XX 30-JAN-2001; 2001WO-US000669.  
 PR  
 XX 30-JAN-2001; 2001WO-US000670.  
 PR  
 XX 23-MAY-2001; 2001US-00864761.  
 PR  
 XX 10-OCT-2001; 2001US-0328205P.  
 XX  
 PA (AEOM-) AEOMICA INC.  
 XX  
 XX Shannon M;  
 PI  
 XX WPI; 2002-684061/74.  
 DR  
 XX Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL  
 PT -1, useful for treating disorders associated with decreased expression or  
 PT activity of human POSHL1.  
 XX  
 XX Example 2; SEQ ID NO 1430; 60pp + Sequence Listing; English.  
 PS  
 XX The invention relates to an isolated SH3 domain (POSH)-like signalling  
 CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino  
 CC acids (SI, ABB83999), a sequence having 65% sequence identity to (SI),  
 CC (SI) having 95% deviations, especially conservative substitutions or a  
 CC fragment of the sequences comprising at least 8 contiguous amino acids.  
 CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an  
 CC adaptor protein that interacts with Rho family small GTPases as well as  
 CC downstream components of the signal transduction pathway. (I) is useful  
 CC for identifying a specific binding partner. (I) and nucleic acids (II)  
 CC encoding (I) are useful for diagnosing, monitoring disease and treating  
 CC caused by altered expression of human POSHL1 including diagnosing and  
 CC treating cancer, they useful in the development of vaccines and (II) is  
 CC useful in gene therapy. (II) is useful for constructing microarrays which  
 CC are useful for measuring and for surveying gene expression and creating  
 CC transgenic non-human animals capable of producing the proteins. The  
 CC present sequence is that of a scanning oligonucleotide useful in examples  
 CC of the invention. Note: The present sequence did not form part of the  
 CC printed specification, but is based on sequence information supplied to  
 CC Derwent by the European Patent Office  
 XX  
 XX Sequence 17 BP; 4 A; 7 C; 3 G; 3 T; 0 U; 0 Other;  
 SQ Query Match 0.6%; Score 12.2; DB 1; Length 17;  
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;  
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1044 TACTAAGCCCTGGGCC 1060  
 |||||  
 Db 1 TACTCAGCCCATGGACC 17  
 |||||  
 RESULT 671  
 ABV91245/c  
 ID ABV91245 standard; DNA; 17 BP.  
 XX  
 XX ABV91245;  
 AC  
 XX  
 XX 23-DEC-2002 (first entry)  
 DT  
 XX

DE Human POSHL1 scanning oligonucleotide SEQ ID NO 1958.  
 XX  
 KW Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;  
 KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;  
 KW Gene therapy; transgenic; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN EP1239051-A2.  
 XX  
 XX 11-SEP-2002.  
 PD  
 XX 28-JAN-2002; 2002EP-00001165.  
 PF  
 XX 30-JAN-2001; 2001WO-US000663.  
 PR  
 XX 30-JAN-2001; 2001WO-US000664.  
 PR  
 XX 30-JAN-2001; 2001WO-US000665.  
 PR  
 XX 30-JAN-2001; 2001WO-US000666.  
 PR  
 XX 30-JAN-2001; 2001WO-US000667.  
 PR  
 XX 30-JAN-2001; 2001WO-US000668.  
 PR  
 XX 30-JAN-2001; 2001WO-US000669.  
 PR  
 XX 30-JAN-2001; 2001WO-US000670.  
 PR  
 XX 23-MAY-2001; 2001US-00864761.  
 PR  
 XX 10-OCT-2001; 2001US-0328205P.  
 XX  
 PA (AEOM-) AEOMICA INC.  
 XX  
 XX Shannon M;  
 PI  
 XX WPI; 2002-684061/74.  
 DR  
 XX Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL  
 PT -1, useful for treating disorders associated with decreased expression or  
 PT activity of human POSHL1.  
 XX  
 XX Example 2; SEQ ID NO 1958; 60pp + Sequence Listing; English.  
 PS  
 XX The invention relates to an isolated SH3 domain (POSH)-like signalling  
 CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino  
 CC acids (SI, ABB83999), a sequence having 65% sequence identity to (SI),  
 CC (SI) having 95% deviations, especially conservative substitutions or a  
 CC fragment of the sequences comprising at least 8 contiguous amino acids.  
 CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an  
 CC adaptor protein that interacts with Rho family small GTPases as well as  
 CC downstream components of the signal transduction pathway. (I) is useful  
 CC for identifying a specific binding partner. (I) and nucleic acids (II)  
 CC encoding (I) are useful for diagnosing, monitoring disease and treating  
 CC caused by altered expression of human POSHL1 including diagnosing and  
 CC treating cancer, they useful in the development of vaccines and (II) is  
 CC useful in gene therapy. (II) is useful for constructing microarrays which  
 CC are useful for measuring and for surveying gene expression and creating  
 CC transgenic non-human animals capable of producing the proteins. The  
 CC present sequence is that of a scanning oligonucleotide useful in examples  
 CC of the invention. Note: The present sequence did not form part of the  
 CC printed specification, but is based on sequence information supplied to  
 CC Derwent by the European Patent Office  
 XX  
 XX Sequence 17 BP; 2 A; 1 C; 10 G; 4 T; 0 U; 0 Other;  
 SQ Query Match 0.6%; Score 12.2; DB 1; Length 17;  
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;  
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1249 GACCCCATCCCCAACCC 1265  
 |||||  
 Db 17 GACCCCATCTCCACCAC 1  
 |||||  
 RESULT 672  
 ABV90718  
 ID ABV90718 standard; DNA; 17 BP.  
 XX  
 XX ABV90718;  
 AC

XX 23-DEC-2002 (first entry)  
XX Human POSHL1 scanning oligonucleotide SEQ ID NO 1431.  
XX Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;  
KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;  
KW gene therapy; transgenic; ss.  
XX Homo sapiens.  
XX EP1239051-A2.  
XX 11-SEP-2002.  
XX 28-JAN-2002; 2002EP-00001165.  
XX 30-JAN-2001; 2001WO-US000663.  
XX 30-JAN-2001; 2001WO-US000664.  
XX 30-JAN-2001; 2001WO-US000665.  
XX 30-JAN-2001; 2001WO-US000666.  
XX 30-JAN-2001; 2001WO-US000667.  
XX 30-JAN-2001; 2001WO-US000668.  
XX 30-JAN-2001; 2001WO-US000669.  
XX 30-JAN-2001; 2001WO-US000670.  
XX 23-MAY-2001; 2001US-00864761.  
XX 10-OCT-2001; 2001US-0328205P.  
XX (AEOM-) ABOMICA INC.  
XX Shannon M;  
XX WPI; 2002-684061/74.  
XX Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL  
PT -1, useful for treating disorders associated with decreased expression or  
PT activity of human POSHL1.  
XX Example 2; SEQ ID NO 1431; 60pp + Sequence Listing; English.  
XX The invention relates to an isolated SH3 domain (POSH)-like signalling  
CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino  
CC acids (S1, AB883999), a sequence having 65% sequence identity to (S1),  
CC (S1) having 95% deviations, especially conservative substitutions or a  
CC fragment of the sequences comprising at least 8 contiguous amino acids.  
CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an  
CC adaptor protein that interacts with Rho family small GTPases as well as  
CC downstream components of the signal transduction pathway. (I) is useful  
CC for identifying a specific binding partner. (II) and nucleic acids (II)  
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CC treating cancer, they are useful in the development of vaccines and (II) is  
CC useful in gene therapy. (II) is useful for constructing microarrays which  
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CC present sequence is that of a scanning oligonucleotide useful in examples  
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CC printed specification, but is based on sequence information supplied to  
CC Derwent by the European Patent Office  
XX Sequence 17 BP; 4 A; 8 C; 3 G; 2 T; 0 U; 0 Other;  
Query Match 0.6%; Score 12.2; DB 1; Length 17;  
Best Local Similarity 82.4%; Pred. NO. 5.9e+02;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1045 ACTAGCCCTGGCC 1061  
DB 1 ACTAGCCCATGGACC 17  
RESULT 673  
ABV90578/C

ID ABV90578 standard; DNA; 17 BP.  
XX AC ABV90578;  
XX 23-DEC-2002 (first entry)  
XX Human POSHL1 scanning oligonucleotide SEQ ID NO 1291.  
XX Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;  
KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;  
KW gene therapy; transgenic; ss.  
XX Homo sapiens.  
XX OS EP1239051-A2.  
XX PN 11-SEP-2002.  
XX PD 28-JAN-2002; 2002EP-00001165.  
XX PF 30-JAN-2001; 2001WO-US000663.  
XX PR 30-JAN-2001; 2001WO-US000664.  
XX PR 30-JAN-2001; 2001WO-US000665.  
XX PR 30-JAN-2001; 2001WO-US000666.  
XX PR 30-JAN-2001; 2001WO-US000667.  
XX PR 30-JAN-2001; 2001WO-US000668.  
XX PR 30-JAN-2001; 2001WO-US000669.  
XX PR 30-JAN-2001; 2001WO-US000670.  
XX PR 23-MAY-2001; 2001US-00864761.  
XX PR 10-OCT-2001; 2001US-0328205P.  
XX PA (AEOM-) ABOMICA INC.  
XX PI Shannon M;  
XX WPI; 2002-684061/74.  
XX Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL  
PT -1, useful for treating disorders associated with decreased expression or  
PT activity of human POSHL1.  
XX Example 2; SEQ ID NO 1291; 60pp + Sequence Listing; English.  
XX The invention relates to an isolated SH3 domain (POSH)-like signalling  
CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino  
CC acids (S1, AB883999), a sequence having 65% sequence identity to (S1),  
CC (S1) having 95% deviations, especially conservative substitutions or a  
CC fragment of the sequences comprising at least 8 contiguous amino acids.  
CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an  
CC adaptor protein that interacts with Rho family small GTPases as well as  
CC downstream components of the signal transduction pathway. (I) is useful  
CC for identifying a specific binding partner. (II) and nucleic acids (II)  
CC encoding (I) are useful for diagnosing, monitoring disease and treating  
CC caused by altered expression of human POSHL1 including diagnosing and  
CC treating cancer, they are useful in the development of vaccines and (II) is  
CC useful in gene therapy. (II) is useful for constructing microarrays which  
CC are useful for measuring and for surveying gene expression and creating  
CC transgenic non-human animals capable of producing the proteins. The  
CC present sequence is that of a scanning oligonucleotide useful in examples  
CC of the invention. Note: The present sequence did not form part of the  
CC printed specification, but is based on sequence information supplied to  
CC Derwent by the European Patent Office  
XX Sequence 17 BP; 3 A; 6 C; 3 G; 5 T; 0 U; 0 Other;  
Query Match 0.6%; Score 12.2; DB 1; Length 17;  
Best Local Similarity 82.4%; Pred. NO. 5.9e+02;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1028 AGCTTGAGGAAGCACTACT 1044  
DB 17 AGCTGGAAGGAACGTCT 1

RESULT 674  
ABV90110/c  
ID ABV90110 standard; DNA; 17 BP.  
XX AC ABV90110;  
XX DT 23-DEC-2002 (first entry)  
XX DE Human POSHL1 scanning oligonucleotide SEQ ID NO 823.  
XX KW Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;  
XX KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;  
XX KW Gene therapy; transgenic; ss.  
XX OS Homo sapiens.  
XX PN EPI239051-A2.  
XX PD 11-SEP-2002.  
XX PF 28-JAN-2002; 2002EP-00001165.  
XX PR 30-JAN-2001; 2001WO-US000663.  
XX PR 30-JAN-2001; 2001WO-US000664.  
XX PR 30-JAN-2001; 2001WO-US000665.  
XX PR 30-JAN-2001; 2001WO-US000666.  
XX PR 30-JAN-2001; 2001WO-US000667.  
XX PR 30-JAN-2001; 2001WO-US000668.  
XX PR 30-JAN-2001; 2001WO-US000669.  
XX PR 23-MAY-2001; 2001WO-US000670.  
XX PR 10-OCT-2001; 2001US-0328205P.  
XX (AEOM-) AEOMICA INC.  
XX Shannon M;  
XX WPI; 2002-684061/74.  
XX Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL  
-1, useful for treating disorders associated with decreased expression or  
activity of human POSHL1.  
XX Example 2; SEQ ID NO 823; 60pp + Sequence Listing; English.  
XX The invention relates to an isolated SH3 domain (POSH)-like signalling  
protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino  
acids (SI, ABB83999), a sequence having 65% sequence identity to (SI),  
(SI) having 95% deviations, especially conservative substitutions or a  
fragment of the sequences comprising at least 8 contiguous amino acids.  
XX Human POSHL 1 is a proto-oncogene/oncogene product that functions as an  
adaptor protein that interacts with Rho family small GTPases as well as  
downstream components of the signal transduction pathway. (I) is useful  
for identifying a specific binding partner. (I) and nucleic acids (II)  
encoding (I) are useful for diagnosing, monitoring disease and treating  
caused by altered expression of human POSHL1 including diagnosing and  
treating cancer, they are useful in the development of vaccines and (II) is  
useful in gene therapy. (II) is useful for constructing microarrays which  
transgenic non-human animals capable of producing the proteins. The  
present sequence is that of a scanning oligonucleotide useful in examples  
of the invention. Note: The present sequence did not form part of the  
printed specification, but is based on sequence information supplied to  
Derwent by the European Patent Office  
XX Sequence 17 BP; 1 A; 8 C; 6 G; 2 T; 0 U; 0 Other;  
Query Match 0.6%; Score 12.2; DB 1; Length 17;  
Best Local Similarity 82.4%; Pred. No. 5.9e+02;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1183 CCCGCGAGAGGTGGC 1199

Db 17 CCTGCGAGCGGGGC 1  
RESULT 675  
ABV90710  
ID ABV90710 standard; DNA; 17 BP.  
XX AC ABV90710;  
XX DT 23-DEC-2002 (first entry)  
XX DE Human POSHL1 scanning oligonucleotide SEQ ID NO 1423.  
XX KW Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;  
XX KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;  
XX KW Gene therapy; transgenic; ss.  
XX OS Homo sapiens.  
XX PN EPI239051-A2.  
XX PD 11-SEP-2002.  
XX PF 28-JAN-2002; 2002EP-00001165.  
XX PR 30-JAN-2001; 2001WO-US000663.  
XX PR 30-JAN-2001; 2001WO-US000664.  
XX PR 30-JAN-2001; 2001WO-US000665.  
XX PR 30-JAN-2001; 2001WO-US000666.  
XX PR 30-JAN-2001; 2001WO-US000667.  
XX PR 30-JAN-2001; 2001WO-US000668.  
XX PR 30-JAN-2001; 2001WO-US000669.  
XX PR 23-MAY-2001; 2001WO-US000670.  
XX PR 10-OCT-2001; 2001US-0328205P.  
XX (AEOM-) AEOMICA INC.  
XX Shannon M;  
XX WPI; 2002-684061/74.  
XX Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL  
-1, useful for treating disorders associated with decreased expression or  
activity of human POSHL1.  
XX Example 2; SEQ ID NO 1423; 60pp + Sequence Listing; English.  
XX The invention relates to an isolated SH3 domain (POSH)-like signalling  
protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino  
acids (SI, ABB83999), a sequence having 65% sequence identity to (SI),  
(SI) having 95% deviations, especially conservative substitutions or a  
fragment of the sequences comprising at least 8 contiguous amino acids.  
XX Human POSHL 1 is a proto-oncogene/oncogene product that functions as an  
adaptor protein that interacts with Rho family small GTPases as well as  
downstream components of the signal transduction pathway. (I) is useful  
for identifying a specific binding partner. (I) and nucleic acids (II)  
encoding (I) are useful for diagnosing, monitoring disease and treating  
caused by altered expression of human POSHL1 including diagnosing and  
treating cancer, they are useful in the development of vaccines and (II) is  
useful in gene therapy. (II) is useful for constructing microarrays which  
transgenic non-human animals capable of producing the proteins. The  
present sequence is that of a scanning oligonucleotide useful in examples  
of the invention. Note: The present sequence did not form part of the  
printed specification, but is based on sequence information supplied to  
Derwent by the European Patent Office  
XX Sequence 17 BP; 3 A; 9 C; 2 G; 3 T; 0 U; 0 Other;  
Query Match 0.6%; Score 12.2; DB 1; Length 17;  
Best Local Similarity 82.4%; Pred. No. 5.9e+02;



CC Derwent by the European Patent Office  
 XX Sequence 17 BP; 2 A; 0 C; 11 G; 4 T; 0 U; 0 Other;  
 SQ Query Match 0.6%; Score 12.2; DB 1; Length 17;  
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;  
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1250 ACCCATCCCGACCC 1266  
 17 ACCCATCTCCACACC 1

DB  
 RESULT 678  
 ABV90714  
 ID ABV90714 standard; DNA; 17 BP.  
 AC ABV90714;  
 XX  
 DT 23-DEC-2002 (first entry)  
 XX  
 DE Human POSHL1 scanning oligonucleotide SEQ ID NO 1427.  
 XX  
 KW Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;  
 KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;  
 KW gene therapy; transgenic; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN EP1239051-A2.  
 XX  
 PD 11-SEP-2002.  
 XX  
 PF 28-JAN-2001; 2002EP-00001165.  
 XX  
 PR 30-JAN-2001; 2001WO-US000663.  
 PR 30-JAN-2001; 2001WO-US000664.  
 PR 30-JAN-2001; 2001WO-US000665.  
 PR 30-JAN-2001; 2001WO-US000666.  
 PR 30-JAN-2001; 2001WO-US000667.  
 PR 30-JAN-2001; 2001WO-US000668.  
 PR 30-JAN-2001; 2001WO-US000669.  
 PR 23-MAY-2001; 2001WO-US000670.  
 PR 23-MAY-2001; 2001US-00864761.  
 PR 10-OCT-2001; 2001US-0328205P.  
 XX  
 PA (AEOM-) AEOMICA INC.  
 XX  
 PI Shannon M;  
 XX  
 DR WPI; 2002-684061/74.  
 XX  
 PT Novel human SH3 domain (POSH)-like signalling protein 1 polypeptide, POSHL  
 PT -1, useful for treating disorders associated with decreased expression or  
 PT activity of human POSHL1.  
 XX  
 PS Example 2; SEQ ID NO 1427; 60pp + Sequence Listing; English.  
 XX  
 CC The invention relates to an isolated SH3 domain (POSH)-like signalling  
 CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino  
 CC acids (S1, AB83999), a sequence having 65% sequence identity to (S1),  
 CC (S1) having 95% deviations, especially conservative substitutions or a  
 CC fragment of the sequences comprising at least 8 contiguous amino acids.  
 CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an  
 CC adaptor protein that interacts with Rho family small GTPases as well as  
 CC downstream components of the signal transduction pathway. (I) is useful  
 CC for identifying a specific binding partner. (I) and nucleic acids (II)  
 CC caused by altered expression of human POSHL1 including diagnosing and  
 CC treating cancer, they useful in the development of vaccines and (II) is  
 CC useful in gene therapy. (II) is useful for constructing microarrays which  
 CC are useful for measuring and for surveying gene expression and creating  
 CC transgenic non-human animals capable of producing the proteins. The

CC present sequence is that of a scanning oligonucleotide useful in examples  
 CC of the invention. Note: The present sequence did not form part of the  
 CC printed specification, but is based on sequence information supplied to  
 CC Derwent by the European Patent Office  
 XX  
 SQ Sequence 17 BP; 3 A; 7 C; 3 G; 4 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 12.2; DB 1; Length 17;  
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;  
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1041 TACTACTAAGCCCTGG 1057  
 1 TCCCTACTCAGCCCATGG 17

DB  
 RESULT 679  
 ABV91249/c  
 ID ABV91249 standard; DNA; 17 BP.  
 XX  
 AC ABV91249;  
 XX  
 DT 23-DEC-2002 (first entry)  
 XX  
 DE Human POSHL1 scanning oligonucleotide SEQ ID NO 1962.  
 XX  
 KW Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;  
 KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;  
 KW gene therapy; transgenic; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN EP1239051-A2.  
 XX  
 PD 11-SEP-2002.  
 XX  
 PF 28-JAN-2001; 2002EP-00001165.  
 XX  
 PR 30-JAN-2001; 2001WO-US000663.  
 PR 30-JAN-2001; 2001WO-US000664.  
 PR 30-JAN-2001; 2001WO-US000665.  
 PR 30-JAN-2001; 2001WO-US000666.  
 PR 30-JAN-2001; 2001WO-US000667.  
 PR 30-JAN-2001; 2001WO-US000668.  
 PR 30-JAN-2001; 2001WO-US000669.  
 PR 30-JAN-2001; 2001WO-US000670.  
 PR 23-MAY-2001; 2001US-00864761.  
 PR 10-OCT-2001; 2001US-0328205P.  
 XX  
 PA (AEOM-) AEOMICA INC.  
 XX  
 PI Shannon M;  
 XX  
 DR WPI; 2002-684061/74.  
 XX  
 PT Novel human SH3 domain (POSH)-like signalling protein 1 polypeptide, POSHL  
 PT -1, useful for treating disorders associated with decreased expression or  
 PT activity of human POSHL1.  
 XX  
 PS Example 2; SEQ ID NO 1962; 60pp + Sequence Listing; English.  
 XX  
 CC The invention relates to an isolated SH3 domain (POSH)-like signalling  
 CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino  
 CC acids (S1, AB83999), a sequence having 65% sequence identity to (S1),  
 CC (S1) having 95% deviations, especially conservative substitutions or a  
 CC fragment of the sequences comprising at least 8 contiguous amino acids.  
 CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an  
 CC adaptor protein that interacts with Rho family small GTPases as well as  
 CC downstream components of the signal transduction pathway. (I) is useful  
 CC for identifying a specific binding partner. (I) and nucleic acids (II)  
 CC caused by altered expression of human POSHL1 including diagnosing and  
 CC treating cancer, they useful in the development of vaccines and (II) is  
 CC useful in gene therapy. (II) is useful for constructing microarrays which  
 CC are useful for measuring and for surveying gene expression and creating  
 CC transgenic non-human animals capable of producing the proteins. The

CC useful in gene therapy. (II) is useful for constructing microarrays which  
 CC are useful for measuring and for surveying gene expression and creating  
 CC transgenic non-human animals capable of producing the proteins. The  
 CC present sequence is that of a scanning oligonucleotide useful in examples  
 CC of the invention. Note: The present sequence did not form part of the  
 CC printed specification, but is based on sequence information supplied to  
 CC Derwent by the European Patent Office

XX SQ Sequence 17 BP; 4 A; 2 C; 8 G; 3 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 12.2; DB 1; Length 17;  
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;  
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1245 CTCGACCCCATCCCA 1261  
 Db 17 CTTGACCCCATCTCCA 1

RESULT 680  
 ABV90712  
 ID ABV90712 standard; DNA; 17 BP.  
 XX AC ABV90712;  
 XX DT 23-DEC-2002 (first entry)  
 XX DE Human POSHL1 scanning oligonucleotide SEQ ID NO 1425.  
 XX KW Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;  
 KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;  
 KW gene therapy; transgenic; ss.  
 XX OS Homo sapiens.  
 XX PN EPI239051-A2.  
 XX PD 11-SEP-2002.  
 XX PF 28-JAN-2002; 2002EP-00001165.  
 XX PR 30-JAN-2001; 2001WO-US0000663.  
 PR 30-JAN-2001; 2001WO-US0000664.  
 PR 30-JAN-2001; 2001WO-US0000665.  
 PR 30-JAN-2001; 2001WO-US0000666.  
 PR 30-JAN-2001; 2001WO-US0000667.  
 PR 30-JAN-2001; 2001WO-US0000668.  
 PR 30-JAN-2001; 2001WO-US0000669.  
 PR 30-JAN-2001; 2001WO-US0000670.  
 PR 23-MAY-2001; 2001US-00864761.  
 PR 10-OCT-2001; 2001US-0328205P.  
 XX PA (ABOM-) ABOMICA INC.  
 XX PI Shannon M;  
 XX PT WPI; 2002-684061/74.  
 XX PT Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL  
 PT -1, useful for treating disorders associated with decreased expression or  
 PT activity of human POSHL1.  
 XX PS Example 2; SEQ ID NO 1425; 60pp + Sequence Listing; English.  
 XX CC The invention relates to an isolated SH3 domain (POSH)-like signalling  
 CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino  
 CC acids (SI, AB883999), a sequence having 65% sequence identity to (SI),  
 CC (SI) having 95% deviations, especially conservative substitutions or a  
 CC fragment of the sequences comprising at least 8 contiguous amino acids.  
 CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an  
 CC adaptor protein that interacts with Rho family small GTPases as well as  
 CC downstream components of the signal transduction pathway. (I) is useful  
 CC for identifying a specific binding partner. (I) and nucleic acids (II)

CC encoding (I) are useful for diagnosing, monitoring disease and treating  
 CC caused by altered expression of human POSHL1 including diagnosing and  
 CC treating cancer, they are useful in the development of vaccines and (II) is  
 CC useful in gene therapy. (II) is useful for constructing microarrays which  
 CC are useful for measuring and for surveying gene expression and creating  
 CC transgenic non-human animals capable of producing the proteins. The  
 CC present sequence is that of a scanning oligonucleotide useful in examples  
 CC of the invention. Note: The present sequence did not form part of the  
 CC printed specification, but is based on sequence information supplied to  
 CC Derwent by the European Patent Office

XX SQ Sequence 17 BP; 4 A; 8 C; 1 G; 4 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 12.2; DB 1; Length 17;  
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;  
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1039 ACTACTACTAAGCCCT 1055  
 Db 1 ACTCTACTCAGCCCAT 17

RESULT 681  
 ABK56419  
 ID ABK56419 standard; RNA; 17 BP.  
 XX AC ABK56419;  
 XX DT 02-JUL-2002 (first entry)  
 XX DE Human CLCA1 gene enzymatic nucleic acid #790.  
 XX KW Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;  
 KW antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;  
 KW chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;  
 KW oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;  
 KW acetylcysteine.  
 XX OS Homo sapiens.  
 XX PN WO200211674-A2.  
 XX PD 14-FEB-2002.  
 XX PF 09-AUG-2001; 2001WO-US024970.  
 XX PR 09-AUG-2000; 2000US-0224383P.  
 XX PA (RIBO-) RIBOZYME PHARM INC.  
 XX PA (SYNT) SYNTX USA LLC.  
 XX PA (THOM) THOMPSON J.  
 XX PI Thompson J, Mcswiggen J, McKenzie T, Ayers D, Szymkowski DE;  
 PI Grupe A;  
 XX PT WPI; 2002-217145/27.  
 XX PT Enzymatic polynucleotide that down regulates expression of chloride  
 PT channel calcium activated gene, useful for treating Chronic obstructive  
 PT pulmonary disease (COPD), chronic bronchitis and asthma.  
 XX PS Claim 4; Page 70; 152pp; English.  
 XX CC The invention relates to enzymatic nucleic acid molecules that down  
 CC regulate expression of chloride channel calcium activated 1 (CLCA1) genes  
 CC by cleaving RNA derived from the genes. The nucleic acid sequences are  
 CC useful as pharmaceutical agents for treating conditions such as chronic  
 CC obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic  
 CC fibrosis, obstructive bowel syndrome and any other diseases or conditions  
 CC that are related to or will respond to the levels of CLCA1 in a cell or  
 CC tissue. The sequences are useful for reducing CLCA1 activity in a cell,  
 CC hence, are useful for treatment of a patient having a condition  
 CC associated with the level of CLCA1, where the invention further comprises



CC	the use of one or more therapies under conditions suitable for the								
CC	treatment, for example, oxygen therapy, corticosteroids,								
CC	antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The								
CC	nucleic acids of the invention are also used as diagnostic tools to								
CC	examine genetic drift and mutations within diseased cells or to detect								
CC	the presence of CLCA1 RNA in a cell. This sequence represents an								
CC	enzymatic nucleic acid molecule of the invention								
XX									
SQ	Sequence 17 BP; 3 A; 7 C; 1 G; 0 T; 6 U; 0 Other;								
	Query Match	0.6%;	Score 12.2;	DB 1;	Length 17;				
	Best Local Similarity	52.9%;	Pred. No. 5.9e+02;						
	Matches	9;	Conservative	5;	Mismatches	3;	Indels	0;	Gaps
Qy	930 ATCCCTCCTCTTCAATG	946							
	:           :       :								
Db	1 AUCCACGUCUCUAUG	17							

RESULT 682  
ACC53759/c  
ID ACC53759 standard; DNA; 17 BP.  
XX  
XX  
AC ACC53759;  
XX  
XX  
DT 27-JUN-2003 (first entry)  
XX  
XX Human tumour suppressor sequence #2526.  
XX  
XX ss; tumour suppressor; antitumour; cytostatic; tumour suppression;  
KW tumour regression; apoptosis; virus resistance; diagnosis;  
KW cellular degeneration.  
XX  
XX Homo sapiens.  
OS  
XX  
XX FR2826373-A1.  
XX  
XX 27-DEC-2002.  
PD  
XX  
XX 20-JUN-2001; 2001FR-00008139.  
PF  
XX  
XX 20-JUN-2001; 2001FR-00008139.  
PR  
XX  
XX (MOLE-) MOLECULAR ENGINES LAB SA.  
PA  
XX  
XX Tuijnder M, Telerman A, Amson R;  
PI  
XX  
XX WPI; 2003-250498/25.  
DR  
XX  
XX New nucleic acid sequences associated with tumor suppression, regression,  
PT apoptosis or virus resistance are useful to diagnose and treat viral  
PT disease, development of tumor cells and cell degeneration.  
XX  
XX Claim 1; Page 623; 798pp; French.  
PS  
XX  
XX This sequence represents an isolated nucleic acid sequence associated  
CC with tumour suppression or regression, apoptosis or virus resistance. The  
CC invention relates to these sequences or sequences having at least 80%  
CC identity to them, and polypeptides encoded by the sequences or  
CC polypeptides having 80% identity to the polypeptide sequences. The  
CC invention is used to diagnose or treat viral disease or disease  
CC characterized by development of tumour cells or cellular degeneration  
XX  
XX Sequence 17 BP; 3 A; 6 C; 1 G; 7 T; 0 U; 0 Other;

RESULT	683
ACA92588	
ID	ACA92588 standard; DNA; 17 BP.
XX	
AC	ACA92588;
XX	
DT	11-AUG-2003 (first entry)
XX	
XX	Human Ki-ras antisense oligonucleotide ISIS 6949.
XX	
KW	Human; ras; cancer; cancer cell proliferation; ras oncogene; oncogene;
KW	colorectal cancer; melanoma; liposarcoma; ss; mesothelioma; sarcoma;
KW	colon cancer; pancreatic cancer; antisense.
XX	
OS	Homo sapiens.
OS	Synthetic.
XX	
PX	US#2003013670-A1.
XX	
PD	16-JAN-2003.
XX	
PF	30-MAY-2001; 2001US-00870002.
XX	
PR	05-OCT-1992; 92US-00958134.
PR	21-JAN-1993; 93US-00007996.
PR	01-OCT-1993; 93WO-US0009346.
PR	03-APR-1995; 95US-00411734.
PR	08-JUL-1997; 97US-00889296.
PR	03-AUG-1998; 98US-00128494.
PR	22-MAY-2000; 2000US-00575554.
XX	
PA	(MONI/) MONIA B P.
PA	(COMS/) COMBERT L M.
PA	(MANO/) MANOHARAN M.
PA	(DORR/) DORR F A.
PA	(HOLM/) HOLMLUND J.
XX	
PI	Monia BP, Cowsett LM, Manoharan M, Dorr FA, Holmlund J;
DR	WPI; 2003-438917/41.
XX	
PT	Composition comprising an antisense oligonucleotide targeted to nucleic acids encoding human ras, and capable of inhibiting ras expression,
PT	useful for treating or preventing colorectal cancer, melanoma, or
PT	sarcoma.
XX	
PS	Disclosure; Page 13; 46pp; English.
XX	
CC	The invention relates to a composition comprising an oligonucleotide which is targeted to a nucleic acid encoding human ras, which is capable of inhibiting ras expression, and at least one chemotherapeutic agent.
CC	The composition is useful for modulating the expression of human ras in tissues or cells containing a ras gene. The composition is also useful for inhibiting the proliferation of cancer cells, where the cancer cells are blood cells, preferably peripheral blood mononuclear cells. The
CC	composition is useful for treating or preventing a condition arising from the activation of ras oncogene which involves contacting an animal suspected of having a condition (e.g. hyperproliferative condition such as cancer preferably colorectal cancer, melanoma, liposarcoma, mesothelioma, sarcoma, colon cancer or pancreatic cancer) arising from the activation of ras oncogene such as abnormal expression of the ras oncogene. The present sequence represents a human ras antisense oligonucleotide
XX	
SQ	Sequence 17 BP; 4 A; 9 C; 2 G; 2 T; 0 U; 0 Other;
Query Match	0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity	82.4%; Pred. No. 5.9e+02;
Matches	14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
YY	1131 CTTCACTTCGAGTCCA 1147 

Db 1 CTAGCCACCAGTCCA 17

RESULT 684  
ABT34365  
ID ABT34365 standard; DNA; 17 BP.  
XX  
AC ABT34365;  
XX  
DT 12-JUN-2003 (first entry)  
XX  
DE Tumour suppression related human fukutin oligo SEQ ID No 2.  
XX  
KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;  
KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;  
KW schizophrenia; protein chip; gene therapy; tumour suppression;  
KW human fukutin; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO2003025175-A2.  
XX  
PD 27-MAR-2003.  
XX  
PF 17-SEP-2002; 2002WO-IB004208.  
XX  
PR 17-SEP-2001; 2001FR-00011978.  
XX  
PA (MOLE-) MOLECULAR ENGINES LAB.  
XX  
PI Telerman A, Amson R, Tuijnder M;  
XX  
DR WPI; 2003-313353/30.  
XX  
PT New isolated nucleic acid, useful for treating viral diseases associated  
PT with tumors and cell degeneration, also related polypeptides, antibodies  
PT and transfected cells.  
XX  
PS Disclosure; Page 34; 720pp; French.  
XX  
CC The invention relates to a novel isolated 17 mer nucleic acid sequence,  
CC given in the specification, a sequence containing at least 15 consecutive  
CC nucleotides from the 17 mer sequence, a sequence with, after optimal  
CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that  
CC hybridizes to them under highly stringent conditions, or the complement  
CC of any of them, or the corresponding RNA. The novel isolated nucleic  
CC acids of the invention are useful as probes and primers for detecting,  
CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one  
CC component of a gene chip, in vitro as (anti)sense reagents, and for  
CC production of recombinant polypeptides. Any of the nucleic acids,  
CC polypeptides, vectors containing the nucleic acids, cells containing the  
CC vector or antibodies directed against the polypeptides are useful for  
CC preparation of pharmaceuticals for prevention and/or treatment of viral  
CC diseases that are characterised by development of tumours or cell  
CC degeneration, specifically cancer but also Alzheimer's disease and  
CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in  
CC patient samples is useful for diagnosis and/or prognosis of these  
CC diseases. The polypeptides can also be used to generate antibodies, and  
CC both the polypeptide and antibodies are useful as components of protein  
CC chips. The nucleic acid sequences of the invention can be used in gene  
CC therapy. This polynucleotide sequence represents a tumour suppression  
CC related human fukutin oligonucleotide of the invention  
XX  
SQ Sequence 17 BP; 2 A; 8 C; 3 G; 4 T; 0 U; 0 Other;  
Query Match 0.6%; Score 12.2; DB 1; Length 17;  
Best Local Similarity 82.4%; Pred. No. 5.9e-02;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1124 GTTCCACCTTCACTCC 1140  
Db 1 GATCCACTTGGCCTCC 17

Db 1 CTAGCCACCAGTCCA 17

RESULT 685  
ABT40203  
ID ABT40203 standard; DNA; 17 BP.  
XX  
AC ABT40203;  
XX  
DT 13-JUN-2003 (first entry)  
XX  
DE Tumour suppression related human fukutin oligo SEQ ID No 5840.  
XX  
KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;  
KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;  
KW schizophrenia; protein chip; gene therapy; tumour suppression;  
KW human fukutin; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO2003025175-A2.  
XX  
PD 27-MAR-2003.  
XX  
PF 17-SEP-2002; 2002WO-IB004208.  
XX  
PR 17-SEP-2001; 2001FR-00011978.  
XX  
PA (MOLE-) MOLECULAR ENGINES LAB.  
XX  
PI Telerman A, Amson R, Tuijnder M;  
XX  
DR WPI; 2003-313353/30.  
XX  
PT New isolated nucleic acid, useful for treating viral diseases associated  
PT with tumors and cell degeneration, also related polypeptides, antibodies  
PT and transfected cells.  
XX  
PS Disclosure; Page 716; 720pp; French.  
XX  
CC The invention relates to a novel isolated 17 mer nucleic acid sequence,  
CC given in the specification, a sequence containing at least 15 consecutive  
CC nucleotides from the 17 mer sequence, a sequence with, after optimal  
CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that  
CC hybridizes to them under highly stringent conditions, or the complement  
CC of any of them, or the corresponding RNA. The novel isolated nucleic  
CC acids of the invention are useful as probes and primers for detecting,  
CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one  
CC component of a gene chip, in vitro as (anti)sense reagents, and for  
CC production of recombinant polypeptides. Any of the nucleic acids,  
CC polypeptides, vectors containing the nucleic acids, cells containing the  
CC vector or antibodies directed against the polypeptides are useful for  
CC preparation of pharmaceuticals for prevention and/or treatment of viral  
CC diseases that are characterised by development of tumours or cell  
CC degeneration, specifically cancer but also Alzheimer's disease and  
CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in  
CC patient samples is useful for diagnosis and/or prognosis of these  
CC diseases. The polypeptides can also be used to generate antibodies, and  
CC both the polypeptide and antibodies are useful as components of protein  
CC chips. The nucleic acid sequences of the invention can be used in gene  
CC therapy. This polynucleotide sequence represents a tumour suppression  
CC related human fukutin oligonucleotide of the invention  
XX  
SQ Sequence 17 BP; 1 A; 3 C; 3 G; 10 T; 0 U; 0 Other;  
Query Match 0.6%; Score 12.2; DB 1; Length 17;  
Best Local Similarity 82.4%; Pred. No. 5.9e-02;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 916 GGTCCTTGGCCTTTATC 932  
Db 1 GATCCTTGGCTTTTGTTC 17

Db 1 CTAGCCACCAGTCCA 17

RESULT 686  
ABT34365  
ID ABT34365 standard; DNA; 17 BP.  
XX  
AC ABT34365;  
XX  
DT 12-JUN-2003 (first entry)  
XX  
DE Tumour suppression related human fukutin oligo SEQ ID No 2.  
XX  
KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;  
KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;  
KW schizophrenia; protein chip; gene therapy; tumour suppression;  
KW human fukutin; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO2003025175-A2.  
XX  
PD 27-MAR-2003.  
XX  
PF 17-SEP-2002; 2002WO-IB004208.  
XX  
PR 17-SEP-2001; 2001FR-00011978.  
XX  
PA (MOLE-) MOLECULAR ENGINES LAB.  
XX  
PI Telerman A, Amson R, Tuijnder M;  
XX  
DR WPI; 2003-313353/30.  
XX  
PT New isolated nucleic acid, useful for treating viral diseases associated  
PT with tumors and cell degeneration, also related polypeptides, antibodies  
PT and transfected cells.  
XX  
PS Disclosure; Page 34; 720pp; French.  
XX  
CC The invention relates to a novel isolated 17 mer nucleic acid sequence,  
CC given in the specification, a sequence containing at least 15 consecutive  
CC nucleotides from the 17 mer sequence, a sequence with, after optimal  
CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that  
CC hybridizes to them under highly stringent conditions, or the complement  
CC of any of them, or the corresponding RNA. The novel isolated nucleic  
CC acids of the invention are useful as probes and primers for detecting,  
CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one  
CC component of a gene chip, in vitro as (anti)sense reagents, and for  
CC production of recombinant polypeptides. Any of the nucleic acids,  
CC polypeptides, vectors containing the nucleic acids, cells containing the  
CC vector or antibodies directed against the polypeptides are useful for  
CC preparation of pharmaceuticals for prevention and/or treatment of viral  
CC diseases that are characterised by development of tumours or cell  
CC degeneration, specifically cancer but also Alzheimer's disease and  
CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in  
CC patient samples is useful for diagnosis and/or prognosis of these  
CC diseases. The polypeptides can also be used to generate antibodies, and  
CC both the polypeptide and antibodies are useful as components of protein  
CC chips. The nucleic acid sequences of the invention can be used in gene  
CC therapy. This polynucleotide sequence represents a tumour suppression  
CC related human fukutin oligonucleotide of the invention  
XX  
SQ Sequence 17 BP; 2 A; 8 C; 3 G; 4 T; 0 U; 0 Other;  
Query Match 0.6%; Score 12.2; DB 1; Length 17;  
Best Local Similarity 82.4%; Pred. No. 5.9e-02;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1124 GTTCCACCTTCACTCC 1140  
Db 1 GATCCACTTGGCCTCC 17





SQL Sequence 17 BP; 1 A; 1 C; 10 G; 5 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;  
Best Local Similarity 82.4%; Pred. No. 5.9e+02;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1290 CCACAGCCACAGAGCC 1306

DB 17 CCACACTCCACAGCC 1

RESULT 690

ADB04343

ID ADB04343 standard; DNA; 17 BP.

XX

AC ADB04343;

XX

DT 20-NOV-2003 (first entry)

XX

DE Human MDZ7 scanning oligonucleotide SEQ ID 5329.

XX

KW Cytostatic; immunostimulant; gene therapy; vaccine; human;

XX zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;

KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;

XX developmental disorder; ss.

KW

XX

OS Homo sapiens.

XX

FN EPI281758-A2.

XX

PD 05-FEB-2003.

XX

PF 30-JUL-2002; 2002EP-00016874.

XX

PR 02-AUG-2001; 2001US-00922181.

XX

XX (AEOM-) AEOMICA INC.

XX

PI Shannon M, Gu Y, Nguyen C;

XX

DR WPI; 2003-423107/40.

XX

PT New zinc finger-containing proteins and nucleic acids, useful in

PT manufacturing a medicament for treating or preventing a disorder

PT associated with decreased or increased expression or activity of MDZ3,

PT MDZ4, MDZ7 or MDZ12, e.g. cancer.

XX

XX Example 8; SEQ ID NO 5329; 103pp; English.

PS

XX The present invention relates to novel human zinc finger-containing proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2, MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy, or in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3, MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic acids and proteins are also useful for diagnosing or monitoring a disease caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic acids can also be used as probes to detect and characterize gross alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are useful in constructing microarrays for measuring gene expression. The proteins are useful as therapeutic agents for gene therapy or as vaccines. The present sequence was used to illustrate the invention.

XX

SQL Sequence 17 BP; 4 A; 8 C; 2 G; 3 T; 0 U; 0 Other;

XX

Query Match 0.6%; Score 12.2; DB 1; Length 17;

Best Local Similarity 82.4%; Pred. No. 5.9e+02;

Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1134 CACTCCAGCTCCACCT 1150

||| | |||||

DB

1 CACTCCAGCTCCACCT 1150

||| | |||||

DB

Query Match 0.6%; Score 12.2; DB 1; Length 17;

Best Local Similarity 82.4%; Pred. No. 5.9e+02;

Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY

1134 CACTCCAGCTCCACCT 1150

||| | |||||

DB

1 CACTCCAGCTCCACCT 1150

||| | |||||

DB 1 CACTCCAGCTCCACCT 17

RESULT 691

ADB05113

ID ADB05113 standard; DNA; 17 BP.

XX

AC ADB05113;

XX

DT 20-NOV-2003 (first entry)

XX

DE Human MDZ12 scanning oligonucleotide SEQ ID 6099.

XX

KW Cytostatic; immunostimulant; gene therapy; vaccine; human;

XX zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;

KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;

XX developmental disorder; ss.

XX

OS Homo sapiens.

XX

FN EPI281758-A2.

XX

PD 05-FEB-2003.

XX

PF 30-JUL-2002; 2002EP-00016874.

XX

PR 02-AUG-2001; 2001US-00922181.

XX

XX (AEOM-) AEOMICA INC.

XX

PI Shannon M, Gu Y, Nguyen C;

XX

DR WPI; 2003-423107/40.

XX

PT New zinc finger-containing proteins and nucleic acids, useful in

PT manufacturing a medicament for treating or preventing a disorder

PT associated with decreased or increased expression or activity of MDZ3,

PT MDZ4, MDZ7 or MDZ12, e.g. cancer.

XX

XX Example 8; SEQ ID NO 6099; 103pp; English.

PS

XX The present invention relates to novel human zinc finger-containing proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2, MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy, or in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3, MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic acids and proteins are also useful for diagnosing or monitoring a disease caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic acids can also be used as probes to detect and characterize gross alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are useful in constructing microarrays for measuring gene expression. The proteins are useful as therapeutic agents for gene therapy or as vaccines. The present sequence was used to illustrate the invention.

XX Sequence 17 BP; 4 A; 1 C; 7 G; 5 T; 0 U; 0 Other;

SQL

Query Match 0.6%; Score 12.2; DB 1; Length 17;

Best Local Similarity 82.4%; Pred. No. 5.9e+02;

Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 988 TCCATTGTTGTGGAA 1004

||||| |||||

DB 1 TGCATTGAGTGTGGAA 17

||||| |||||

DB

RESULT 692

ADB04342

ID ADB04342 standard; DNA; 17 BP.

XX

AC ADB04342;



```
PF 30-JUL-2002; 2002EP-00016874.
XX
PR 02-AUG-2001; 2001US-00922181.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Shannon M, Gu Y, Nguyen C;
XX
XX WPI; 2003-423107/40.
XX
XX
XX New zinc finger-containing proteins and nucleic acids, useful in
PT manufacturing a medicament for treating or preventing a disorder
PT associated with decreased or increased expression or activity of MDZ3,
PT MDZ4, MDZ7 or MDZ12, e.g. cancer.
XX
XX Example 8; SEQ ID NO 5332; 103pp; English.
XX
XX
XX The present invention relates to novel human zinc finger-containing
CC proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is
CC encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2,
CC MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome
CC 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy,
CC or in manufacturing a medicament for treating or preventing a disorder
CC associated with decreased or increased expression or activity of MDZ3,
CC MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic
CC acids and proteins are also useful for diagnosing or monitoring a disease
CC caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic
CC acids can also be used as probes to detect and characterize gross
CC alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are
CC useful in constructing microarrays for measuring gene expression. The
CC proteins are useful as therapeutic agents for gene therapy or as
CC vaccines. The present sequence was used to illustrate the invention.
XX
XX Sequence 17 BP; 3 A; 8 C; 2 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1019 AAGAGGGGAGCTTGAA 1035
DB 17 AGGAGGTGGAGCTTGCA 1
RESULT 695
ADB03496
ID ADB03496 standard; DNA; 17 BP.
XX
XX ADB03496;
AC
XX
XX 20-NOV-2003 (first entry)
DT
XX
XX Human MDZ7 scanning oligonucleotide SEQ ID 4482.
DE
XX
XX Cytostatic; immunostimulant; gene therapy; vaccine; human;
KW zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;
KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
KW developmental disorder; ss.
XX
XX Homo sapiens.
OS
XX
XX EP1281758-A2.
PN
XX
XX 05-FEB-2003.
PD
XX
XX 30-JUL-2002; 2002EP-00016874.
PF
XX
XX 02-AUG-2001; 2001US-00922181.
PR
XX
XX (AEOM-) AEOMICA INC.
PA
XX
XX Shannon M, Gu Y, Nguyen C;
PI
XX
XX WPI; 2003-423107/40.
XX
XX New zinc finger-containing proteins and nucleic acids, useful in
PT manufacturing a medicament for treating or preventing a disorder
PT associated with decreased or increased expression or activity of MDZ3,
PT MDZ4, MDZ7 or MDZ12, e.g. cancer.
XX
XX Example 8; SEQ ID NO 620; 103pp; English.
PS
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DR WPI; 2003-423107/40.
XX
XX New zinc finger-containing proteins and nucleic acids, useful in
PT manufacturing a medicament for treating or preventing a disorder
PT associated with decreased or increased expression or activity of MDZ3,
PT MDZ4, MDZ7 or MDZ12, e.g. cancer.
XX
XX Example 8; SEQ ID NO 4482; 103pp; English.
XX
XX The present invention relates to novel human zinc finger-containing
CC proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is
CC encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2,
CC MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome
CC 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy,
CC or in manufacturing a medicament for treating or preventing a disorder
CC associated with decreased or increased expression or activity of MDZ3,
CC MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic
CC acids and proteins are also useful for diagnosing or monitoring a disease
CC caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic
CC acids can also be used as probes to detect and characterize gross
CC alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are
CC useful in constructing microarrays for measuring gene expression. The
CC proteins are useful as therapeutic agents for gene therapy or as
CC vaccines. The present sequence was used to illustrate the invention.
XX
XX Sequence 17 BP; 3 A; 8 C; 2 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1107 CTTCACTCCCGGCCCA 1123
DB 1 CTCGAGTCCCTTACCCA 17
RESULT 696
ADA99631/c
ID ADA99631 standard; DNA; 17 BP.
XX
XX ADA99631;
AC
XX
XX 20-NOV-2003 (first entry)
DT
XX
XX Human MDZ3 scanning oligonucleotide SEQ ID 620.
DE
XX
XX Cytostatic; immunostimulant; gene therapy; vaccine; human;
KW zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;
KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
KW developmental disorder; ss.
XX
XX Homo sapiens.
OS
XX
XX EP1281758-A2.
PN
XX
XX 05-FEB-2003.
PD
XX
XX 30-JUL-2002; 2002EP-00016874.
PF
XX
XX 02-AUG-2001; 2001US-00922181.
PR
XX
XX (AEOM-) AEOMICA INC.
PA
XX
XX Shannon M, Gu Y, Nguyen C;
PI
XX
XX WPI; 2003-423107/40.
XX
XX New zinc finger-containing proteins and nucleic acids, useful in
PT manufacturing a medicament for treating or preventing a disorder
PT associated with decreased or increased expression or activity of MDZ3,
PT MDZ4, MDZ7 or MDZ12, e.g. cancer.
XX
XX Example 8; SEQ ID NO 620; 103pp; English.
PS
```

XX The present invention relates to novel human zinc finger-containing  
CC proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is  
CC encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2,  
CC MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome  
CC 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy,  
CC or in manufacturing a medicament for treating or preventing a disorder  
CC associated with decreased or increased expression or activity of MDZ3,  
CC MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic  
CC acids and proteins are also useful for diagnosing or monitoring a disease  
CC caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic  
CC acids can also be used as probes to detect and characterize gross  
CC alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are  
CC useful in constructing microarrays for measuring gene expression. The  
CC proteins are useful as therapeutic agents for gene therapy or as  
CC vaccines. The present sequence was used to illustrate the invention.  
XX  
SQ Sequence 17 BP; 2 A; 5 C; 7 G; 3 T; 0 U; 0 Other;  
Query Match 0.6%; Score 12.2; DB 1; Length 17;  
Best Local Similarity 82.4%; Pred. No. 5.9e+02;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1210 CAGGGGGTGCACCCCAT 1226  
DB 17 CAGGGGGTGCATCCCCCAT 1  
RESULT 697  
ADB02193/c  
ID ADB02193 standard; DNA; 17 BP.  
XX  
AC ADB02193;  
XX  
XX 20-NOV-2003 (first entry)  
XX Human MDZ4 scanning oligonucleotide SEQ ID 3179.  
DE  
XX Cytostatic; immunostimulant; gene therapy; vaccine; human;  
KW zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;  
KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;  
KW developmental disorder; ss.  
XX  
OS Homo sapiens.  
XX  
XX EP1281758-A2.  
XX  
XX 05-FEB-2003.  
XX  
XX 30-JUL-2002; 2002EP-00016874.  
XX  
XX 02-AUG-2001; 2001US-00922181.  
XX  
XX (AEOM-) AEOMICA INC.  
XX  
XX Shannon M, Gu Y, Nguyen C;  
XX  
XX WPI; 2003-423107/40.  
XX  
XX New zinc finger-containing proteins and nucleic acids, useful in  
PT manufacturing a medicament for treating or preventing a disorder  
PT associated with decreased or increased expression or activity of MDZ3,  
PT MDZ4, MDZ7 or MDZ12, e.g. cancer.  
XX  
XX Example 8; SEQ ID NO 3179; 103pp; English.  
XX  
XX The present invention relates to novel human zinc finger-containing  
CC proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is  
CC encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2,  
CC MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome  
CC 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy,  
CC or in manufacturing a medicament for treating or preventing a disorder  
CC associated with decreased or increased expression or activity of MDZ3,  
XX

CC MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic  
CC acids and proteins are also useful for diagnosing or monitoring a disease  
CC caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic  
CC acids can also be used as probes to detect and characterize gross  
CC alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are  
CC useful in constructing microarrays for measuring gene expression. The  
CC proteins are useful as therapeutic agents for gene therapy or as  
CC vaccines. The present sequence was used to illustrate the invention.  
XX  
SQ Sequence 17 BP; 8 A; 0 C; 7 G; 2 T; 0 U; 0 Other;  
Query Match 0.6%; Score 12.2; DB 1; Length 17;  
Best Local Similarity 82.4%; Pred. No. 5.9e+02;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1125 TTCACCTTCACCTCCA 1141  
DB 17 TTCCTCCTTACCTTCA 1  
RESULT 698  
ADA99615/c  
ID ADA99615 standard; DNA; 17 BP.  
XX  
XX ADA99615;  
XX  
XX 20-NOV-2003 (first entry)  
XX Human MDZ3 scanning oligonucleotide SEQ ID 604.  
DE  
XX Cytostatic; immunostimulant; gene therapy; vaccine; human;  
KW zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;  
KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;  
KW developmental disorder; ss.  
XX  
OS Homo sapiens.  
XX  
XX EP1281758-A2.  
XX  
XX 05-FEB-2003.  
XX  
XX 30-JUL-2002; 2002EP-00016874.  
XX  
XX 02-AUG-2001; 2001US-00922181.  
XX  
XX (AEOM-) AEOMICA INC.  
XX  
XX Shannon M, Gu Y, Nguyen C;  
XX  
XX WPI; 2003-423107/40.  
XX  
XX New zinc finger-containing proteins and nucleic acids, useful in  
PT manufacturing a medicament for treating or preventing a disorder  
PT associated with decreased or increased expression or activity of MDZ3,  
PT MDZ4, MDZ7 or MDZ12, e.g. cancer.  
XX  
XX Example 8; SEQ ID NO 604; 103pp; English.  
XX  
XX The present invention relates to novel human zinc finger-containing  
CC proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is  
CC encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2,  
CC MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome  
CC 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy,  
CC or in manufacturing a medicament for treating or preventing a disorder  
CC associated with decreased or increased expression or activity of MDZ3,  
CC MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic  
CC acids and proteins are also useful for diagnosing or monitoring a disease  
CC caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic  
CC acids can also be used as probes to detect and characterize gross  
CC alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are  
CC useful in constructing microarrays for measuring gene expression. The  
CC proteins are useful as therapeutic agents for gene therapy or as  
CC vaccines. The present sequence was used to illustrate the invention.  
XX



```

XX SQ Sequence 17 BP; 5 A; 2 C; 6 G; 4 T; 0 U; 0 Other;
Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1083 TCCAGGCTTCACCCCA 1099
DB 17 TTCAGGCTTAACCTCCA 1

RESULT 699
ABZ64997
ID ABZ64997 standard; RNA; 17 BP.
XX AC ABZ64997;
XX DT 21-MAR-2003 (first entry)
XX DE Human HER2 DNazyme substrate #454.
XX KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
KW anti-rheumatic; cancer; AIDS; ss.
XX OS Homo sapiens.
XX PN WO200297114-A2.
XX PD 05-DEC-2002.
XX PF 29-MAY-2002; 2002WO-US016840.
XX PR 29-MAY-2001; 2001US-0294140P.
XX PR 06-JUN-2001; 2001US-0296249P.
XX PR 10-SEP-2001; 2001US-0318471P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PI Mcswiggen J;
XX PF WI; 2003-140484/13.
XX PT Novel short interfering RNA and enzymatic nucleic acid useful for
PT treating cancer, modulates the expression of a nucleic acid encoding
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX PS Claim 4; Page 141; 185pp; English.
XX CC The invention relates to a novel short interfering RNA (siRNA) nucleic
XX acid molecule or an enzymatic nucleic acid molecule, that modulates
XX expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
XX human immunodeficiency virus (HIV) or a component of HIV. The nucleic
XX acid molecule of the invention has cytostatic, anti-HIV, and anti-
XX rheumatic activity. The nucleic acid molecules are useful for reducing
XX HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
XX also useful for treating breast, ovarian, colorectal, lung, prostate,
XX bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
XX shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
XX ABZ66530 - ABZ66585 represent substrate/target sequences for the human
XX ribozymes of the invention
XX SQ Sequence 17 BP; 2 A; 4 C; 6 G; 0 T; 5 U; 0 Other;
Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 52.9%; Pred. No. 5.9e+02;
Matches 9; Conservative 5; Mismatches 3; Indels 0; Gaps 0;

QY 785 ACAGTGTGTCTCTGT 801
DB 1 ACCAGUGUGGCGCTUG 17

RESULT 700
ABZ62152
ID ABZ62152 standard; RNA; 17 BP.
XX AC ABZ62152;
XX DT 21-MAR-2003 (first entry)
XX DE Human H-Ras DNazyme target #943.
XX KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
KW anti-rheumatic; cancer; AIDS; ss.
XX OS Homo sapiens.
XX PN WO200297114-A2.
XX PD 05-DEC-2002.
XX PF 29-MAY-2002; 2002WO-US016840.
XX PR 29-MAY-2001; 2001US-0294140P.
XX PR 06-JUN-2001; 2001US-0296249P.
XX PR 10-SEP-2001; 2001US-0318471P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PI Mcswiggen J;
XX PF WI; 2003-140484/13.
XX PT Novel short interfering RNA and enzymatic nucleic acid useful for
PT treating cancer, modulates the expression of a nucleic acid encoding
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX PS Claim 58; Page 131; 185pp; English.
XX CC The invention relates to a novel short interfering RNA (siRNA) nucleic
XX acid molecule or an enzymatic nucleic acid molecule, that modulates
XX expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
XX human immunodeficiency virus (HIV) or a component of HIV. The nucleic
XX acid molecule of the invention has cytostatic, anti-HIV, and anti-
XX rheumatic activity. The nucleic acid molecules are useful for reducing
XX HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
XX also useful for treating breast, ovarian, colorectal, lung, prostate,
XX bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
XX shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
XX ABZ66530 - ABZ66585 represent substrate/target sequences for the human
XX ribozymes of the invention
XX SQ Sequence 17 BP; 3 A; 5 C; 6 G; 0 T; 3 U; 0 Other;
Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 70.6%; Pred. No. 5.9e+02;
Matches 12; Conservative 2; Mismatches 3; Indels 0; Gaps 0;

QY 1208 ATCAGGGGCTGACCCC 1224
DB 1 AUGUGGGAGCUGACCCC 17

RESULT 701
ABZ65474/C
ID ABZ65474 standard; RNA; 17 BP.
XX AC ABZ65474;
XX DT 21-MAR-2003 (first entry)
XX DE Human HER2 DNazyme substrate #931.
XX
```





```
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PA (BLAT/) BLATT L.
XX PA (MACE/) MACEJAK D.
XX PA (MCSW/) MCSWIGGEN J.
XX PA (MORR/) MORRISSEY D.
XX PA (PAVC/) PAVCO P.
XX PA (LEEP/) LEE P.
XX PA (DRAP/) DRAPER K.
XX PA (ROBE/) ROBERTS E.
XX PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
XX PI Draper K, Roberts E;
XX DR WPI; 2003-229207/22.
XX XX Novel compound useful for treating cirrhosis, liver failure,
XX PT hepatocellular carcinoma, or condition associated with hepatitis C virus
XX PT infection.
XX XX Example 1; Page 204; 387pp; English.
XX CC The present invention relates to nucleic acid molecules which modulate
XX CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
XX CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
XX CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
XX CC inozymes, zinzymes, amberyms, and G-cleaver ribozymes. Also disclosed
XX CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
XX CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
XX CC as oligonucleotides that specifically bind the Enhancer I region of HBV
XX CC DNA. The nucleic acids may be used to modulate the expression of HBV
XX CC genes and HBV viral replication. Also disclosed is a method for screening
XX CC compounds and/or potential therapies directed against HBV, and compounds
XX CC that modulate the expression and/or replication of HCV. The compounds and
XX CC methods of the invention are useful for the treatment of degenerative and
XX CC disease states related to HBV and HCV infection, replication and gene
XX CC expression such as cirrhosis, liver failure, and hepatocellular
XX CC carcinoma. The present sequence represents a substrate for one of the HBV
XX CC ribozyme, inozyme, G-cleaver, zinzyme, DNazyme or amberyms sequences
XX CC disclosed in the present invention
XX SQ Sequence 17 BP; 8 A; 0 C; 5 G; 0 T; 4 U; 0 Other;
XX CC Query Match 0.6%; Score 12.2; DB 1; Length 17;
XX CC Best Local Similarity 70.6%; Pred. No. 5.9e+02;
XX CC Matches 12; Conservative 2; Mismatches 3; Indels 0; Gaps 0;
XX QY 1016 AAAAAAGAGGGGAGCTT 1032
XX DB 1 AAAAAAGAGGGGGAU 17
XX RESULT 706
XX ACID63867
XX ID ACID63867 standard; RNA; 17 BP.
XX AC ACID63867;
XX XX 30-SEP-2003 (first entry)
XX DT HCV minus strand DNazyme substrate sequence #1282.
XX DE Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
XX KW RNA stability; RNA expression; RNA synthesis; antisense;
XX KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; zinzyme;
XX KW amberyms; G-cleaver ribozyme; decoy molecule; aptamer;
XX KW HBV reverse transcriptase; Enhancer I region; viral replication;
XX KW degenerative disease state; HBV infection; HCV infection; cirrhosis;
XX KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
XX KW virucide; antiinflammatory; substrate; ss.
XX XX Hepatitis C virus.
XX OS
XX XX
```

```
PN XX (RIBO-) RIBOZYME PHARM INC.
XX PD (BLAT/) BLATT L.
XX XX (MACE/) MACEJAK D.
XX PF (MCSW/) MCSWIGGEN J.
XX XX (MORR/) MORRISSEY D.
XX PR (PAVC/) PAVCO P.
XX PR (LEEP/) LEE P.
XX PR (DRAP/) DRAPER K.
XX PR (ROBE/) ROBERTS E.
XX XX (RIBO-) RIBOZYME PHARM INC.
XX PA (BLAT/) BLATT L.
XX PA (MACE/) MACEJAK D.
XX PA (MCSW/) MCSWIGGEN J.
XX PA (MORR/) MORRISSEY D.
XX PA (PAVC/) PAVCO P.
XX PA (LEEP/) LEE P.
XX PA (DRAP/) DRAPER K.
XX PA (ROBE/) ROBERTS E.
XX PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
XX PI Draper K, Roberts E;
XX DR WPI; 2003-229207/22.
XX XX Novel compound useful for treating cirrhosis, liver failure,
XX PT hepatocellular carcinoma, or condition associated with hepatitis C virus
XX PT infection.
XX PS Claim 1; Page 297; 387pp; English.
XX CC The present invention relates to nucleic acid molecules which modulate
XX CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
XX CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
XX CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
XX CC inozymes, zinzymes, amberyms, and G-cleaver ribozymes. Also disclosed
XX CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
XX CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
XX CC as oligonucleotides that specifically bind the Enhancer I region of HBV
XX CC DNA. The nucleic acids may be used to modulate the expression of HBV
XX CC genes and HBV viral replication. Also disclosed is a method for screening
XX CC compounds and/or potential therapies directed against HBV, and compounds
XX CC that modulate the expression and/or replication of HCV. The compounds and
XX CC methods of the invention are useful for the treatment of degenerative and
XX CC disease states related to HBV and HCV infection, replication and gene
XX CC expression such as cirrhosis, liver failure, and hepatocellular
XX CC carcinoma. The present sequence represents a substrate for one of the HBV
XX CC ribozyme, inozyme, G-cleaver, zinzyme, DNazyme or amberyms sequences
XX CC disclosed in the present invention
XX SQ Sequence 17 BP; 2 A; 6 C; 3 G; 0 T; 6 U; 0 Other;
XX CC Query Match 0.6%; Score 12.2; DB 1; Length 17;
XX CC Best Local Similarity 58.8%; Pred. No. 5.9e+02;
XX CC Matches 10; Conservative 4; Mismatches 3; Indels 0; Gaps 0;
XX QY 883 ACCACAGTGTCTTGGC 899
XX DB 1 ACCUAGUGUCUUGCC 17
XX RESULT 707
XX ACID51051/c
XX ID ACID51051 standard; RNA; 17 BP.
XX AC ACID51051;
XX XX 23-SEP-2003 (first entry)
XX DT HBV hammerhead ribozyme substrate sequence #364.
XX DE
XX XX
```

KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;  
 KW RNA stability; RNA expression; RNA synthesis; antisense;  
 KW enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;  
 KW amberyne; G-cleaver ribozyme; decoy molecule; aptamer;  
 KW HBV reverse transcriptase; Enhancer I region; viral replication;  
 KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;  
 KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;  
 KW virucide; antiinflammatory; substrate; ss.  
 XX  
 OS Hepatitis B virus.  
 XX  
 XX WO200281494-A1.  
 XX  
 PD 17-OCT-2002.  
 XX  
 XX 26-MAR-2002; 2002WO-US009187.  
 XX  
 XX 26-MAR-2001; 2001US-00817879.  
 XX  
 PR 08-JUN-2001; 2001US-00877478.  
 PR  
 PR 08-JUN-2001; 2001US-0296876P.  
 PR  
 PR 24-OCT-2001; 2001US-0335059P.  
 PR  
 PR 05-DEC-2001; 2001US-0337055P.  
 XX  
 XX (RIBO-) RIBOZYME PHARM INC.  
 PA  
 PA (BLAT/) BLATT L.  
 PA (MACE/) MACEJAK D.  
 PA (MCSW/) MCSWIGGEN J.  
 PA (MORR/) MORRISSEY D.  
 PA (PAVC/) PAVCO P.  
 PA (LEEP/) LEE P.  
 PA (DRAP/) DRAPER K.  
 PA (ROBE/) ROBERTS E.  
 XX  
 XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;  
 PI Draper K, Roberts E;  
 XX WPI; 2003-229207/22.  
 DR  
 XX Novel compound useful for treating cirrhosis, liver failure,  
 PT hepatocellular carcinoma, or condition associated with hepatitis C virus  
 PT infection.  
 XX  
 PS Example 1; Page 143; 387pp; English.  
 XX  
 CC The present invention relates to nucleic acid molecules which modulate  
 CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or  
 CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense  
 CC and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes,  
 CC inozymes, zinzymes, amberyne, and G-cleaver ribozymes. Also disclosed  
 CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse  
 CC transcriptase and/or HBV reverse transcriptase primer sequences, as well  
 CC as oligonucleotides that specifically bind the Enhancer I region of HBV  
 CC DNA. The nucleic acids may be used to modulate the expression of HBV  
 CC genes and HBV viral replication. Also disclosed is a method for screening  
 CC compounds and/or potential therapies directed against HBV, and compounds  
 CC that modulate the expression and/or replication of HCV. The compounds and  
 CC methods of the invention are useful for the treatment of degenerative and  
 CC disease states related to HBV and HCV infection, replication and gene  
 CC expression such as cirrhosis, liver failure, and hepatocellular  
 CC carcinoma. The present sequence represents a substrate for one of the HBV  
 CC ribozyme, inozyme, G-cleaver, zinzyme, DNAzyme or amberyne sequences  
 CC disclosed in the present invention  
 XX  
 SQ Sequence 17 BP; 5 A; 1 C; 6 G; 0 T; 5 U; 0 Other;  
 Query Match 0.6%; Score 12.2; DB 1; Length 17;  
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;  
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 828 CACGAAGTTGCGCTAC 844  
 |||||  
 DB 17 CACCAATTTATGCGCTAC 1

RESULT 708  
 ACD61716/c  
 ID ACD61716 standard; RNA; 17 BP.  
 XX  
 AC ACD61716;  
 DT  
 XX 23-SEP-2003 (first entry)  
 DE  
 XX HCV minus strand DNAzyme substrate sequence #195.  
 KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;  
 KW RNA stability; RNA expression; RNA synthesis; antisense;  
 KW enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;  
 KW amberyne; G-cleaver ribozyme; decoy molecule; aptamer;  
 KW HBV reverse transcriptase; Enhancer I region; viral replication;  
 KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;  
 KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;  
 KW virucide; antiinflammatory; substrate; ss.  
 XX  
 OS Hepatitis C virus.  
 XX  
 PN WO200281494-A1.  
 XX  
 PD 17-OCT-2002.  
 XX  
 XX 26-MAR-2002; 2002WO-US009187.  
 XX  
 XX 26-MAR-2001; 2001US-00817879.  
 XX  
 PR 08-JUN-2001; 2001US-00877478.  
 PR  
 PR 08-JUN-2001; 2001US-0296876P.  
 PR  
 PR 24-OCT-2001; 2001US-0335059P.  
 PR  
 PR 05-DEC-2001; 2001US-0337055P.  
 XX  
 XX (RIBO-) RIBOZYME PHARM INC.  
 PA  
 PA (BLAT/) BLATT L.  
 PA (MACE/) MACEJAK D.  
 PA (MCSW/) MCSWIGGEN J.  
 PA (MORR/) MORRISSEY D.  
 PA (PAVC/) PAVCO P.  
 PA (LEEP/) LEE P.  
 PA (DRAP/) DRAPER K.  
 PA (ROBE/) ROBERTS E.  
 XX  
 XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;  
 PI Draper K, Roberts E;  
 XX WPI; 2003-229207/22.  
 DR  
 XX Novel compound useful for treating cirrhosis, liver failure,  
 PT hepatocellular carcinoma, or condition associated with hepatitis C virus  
 PT infection.  
 XX  
 PS Claim 1; Page 278; 387pp; English.  
 XX  
 CC The present invention relates to nucleic acid molecules which modulate  
 CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or  
 CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense  
 CC and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes,  
 CC inozymes, zinzymes, amberyne, and G-cleaver ribozymes. Also disclosed  
 CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse  
 CC transcriptase and/or HBV reverse transcriptase primer sequences, as well  
 CC as oligonucleotides that specifically bind the Enhancer I region of HBV  
 CC DNA. The nucleic acids may be used to modulate the expression of HBV  
 CC genes and HBV viral replication. Also disclosed is a method for screening  
 CC compounds and/or potential therapies directed against HBV, and compounds  
 CC that modulate the expression and/or replication of HCV. The compounds and  
 CC methods of the invention are useful for the treatment of degenerative and  
 CC disease states related to HBV and HCV infection, replication and gene  
 CC expression such as cirrhosis, liver failure, and hepatocellular  
 CC carcinoma. The present sequence represents a substrate for one of the HCV  
 CC ribozyme, inozyme, G-cleaver, zinzyme, DNAzyme or amberyne sequences  
 CC disclosed in the present invention

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XX SQ Sequence 17 BP; 7 A; 5 C; 4 G; 0 T; 1 U; 0 Other;
Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 900 CCTGGTCATTTCTTTG 916
DB 17 CCTGGTCGTTATCTGTG 1

RESULT 709
ACD63372/c
ID ACD63372 standard; RNA; 17 BP.
XX AC ACD63372;
XX 30-SEP-2003 (first entry)
XX HCV minus strand DNzyme substrate sequence #1011.
DE Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW RNA stability; RNA expression; RNA synthesis; antisense;
KW enzymatic nucleic acid; hammerhead ribozyme; DNzyme; inozyme; zinzyme;
KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
KW HBV reverse transcriptase; Enhancer I region; viral replication;
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW virucide; antiinflammatory; substrate; ss.
XX Hepatitis C virus.
OS WO200281494-A1.
PN 17-OCT-2002.
XX 26-MAR-2002; 2002WO-US009187.
XX 26-MAR-2001; 2001US-00817879.
XX 08-JUN-2001; 2001US-00877478.
XX 08-JUN-2001; 2001US-0296876P.
XX 24-OCT-2001; 2001US-0335059P.
XX 05-DEC-2001; 2001US-0337055P.
XX (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MACE/) MACEJAK D.
PA (MCSW/) MCSWIGGEN J.
PA (MORR/) MORRISSEY D.
PA (PAVC/) PAVCO P.
PA (LEEP/) LEE P.
PA (DRAP/) DRAPER K.
PA (ROBE/) ROBERTS E.
XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
PI Draper K, Roberts E;
XX WPI; 2003-229207/22.
XX Novel compound useful for treating cirrhosis, liver failure,
PT hepatocellular carcinoma, or condition associated with hepatitis C virus
PT infection.
XX Claim 1; Page 293; 387pp; English.
XX The present invention relates to nucleic acid molecules which modulate
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNzymes,
CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well

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CC as oligonucleotides that specifically bind the Enhancer I region of HBV
CC DNA. The nucleic acids may be used to modulate the expression of HBV
CC genes and HBV viral replication. Also disclosed is a method for screening
CC compounds and/or potential therapies directed against HBV, and compounds
CC that modulate the expression and/or replication of HCV. The compounds and
CC methods of the invention are useful for the treatment of degenerative and
CC disease states related to HBV and HCV infection, replication and gene
CC expression such as cirrhosis, liver failure, and hepatocellular
CC carcinoma. The present sequence represents a substrate for one of the HCV
CC DNzyme or minus strand DNzyme sequences disclosed in the present
CC invention
XX
XX SQ Sequence 17 BP; 3 A; 4 C; 7 G; 0 T; 3 U; 0 Other;
Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1092 CACCCCCACCTGGCT 1108
DB 17 CACCCCCATCGTGGAT 1

RESULT 710
ACD53015
ID ACD53015 standard; RNA; 17 BP.
XX AC ACD53015;
XX 24-SEP-2003 (first entry)
XX HBV inozyme substrate sequence #86.
DE Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW RNA stability; RNA expression; RNA synthesis; antisense;
KW enzymatic nucleic acid; hammerhead ribozyme; DNzyme; inozyme; zinzyme;
KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
KW HBV reverse transcriptase; Enhancer I region; viral replication;
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW virucide; antiinflammatory; substrate; ss.
XX Hepatitis B virus.
OS WO200281494-A1.
PN 17-OCT-2002.
XX 26-MAR-2002; 2002WO-US009187.
XX 26-MAR-2001; 2001US-00817879.
XX 08-JUN-2001; 2001US-00877478.
XX 08-JUN-2001; 2001US-0296876P.
XX 24-OCT-2001; 2001US-0335059P.
XX 05-DEC-2001; 2001US-0337055P.
XX (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MACE/) MACEJAK D.
PA (MCSW/) MCSWIGGEN J.
PA (MORR/) MORRISSEY D.
PA (PAVC/) PAVCO P.
PA (LEEP/) LEE P.
PA (DRAP/) DRAPER K.
PA (ROBE/) ROBERTS E.
XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
PI Draper K, Roberts E;
XX WPI; 2003-229207/22.
XX Novel compound useful for treating cirrhosis, liver failure,
PT hepatocellular carcinoma, or condition associated with hepatitis C virus
PT infection.
XX Claim 1; Page 293; 387pp; English.
XX The present invention relates to nucleic acid molecules which modulate
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNzymes,
CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well

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PT infection.
XX
PS Example 1; Page 163; 387pp; English.
XX
CC The present invention relates to nucleic acid molecules which modulate
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC as oligonucleotides that specifically bind the Enhancer I region of HBV
CC DNA. The nucleic acids may be used to modulate the expression of HBV
CC genes and HBV viral replication. Also disclosed is a method for screening
CC compounds and/or potential therapies directed against HBV, and compounds
CC that modulate the expression and/or replication of HCV. The compounds and
CC methods of the invention are useful for the treatment of degenerative and
CC disease states related to HBV and HCV infection, replication and gene
CC expression such as cirrhosis, liver failure, and hepatocellular
CC carcinoma. The present sequence represents a substrate for one of the HBV
CC ribozyme, inozyme, G-cleaver, zinzyme, DNazyme or amberyzyme sequences
CC disclosed in the present invention
XX
SQ Sequence 17 BP; 2 A; 9 C; 3 G; 0 T; 3 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 70.6%; Pred. No. 5.9e+02;
Matches 12; Conservative 2; Mismatches 3; Indels 0; Gaps 0;

QY 1085 CAGGCTTCACCCACC 1101
Db 1 CAGGCTTCACCCACC 17
|||||:|||||:|

RESULT 711
ACC64699/c
ID ACC64699 standard; DNA; 17 BP.
XX
AC ACC64699;
XX
DT 01-JUL-2003 (first entry)
XX
DE Murine oligonucleotide associated with tumour suppression, SEQ ID 1946.
XX
KW Cytostatic; virucide; neuroprotective; nontropic; neuroleptic; murine;
KW tumour suppression; tumour reversion; apoptosis; virus resistance;
KW viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizoprenia; ss.
XX
OS Mus musculus.
XX
PN WO2003025176-A2.
XX
PD 27-MAR-2003.
XX
PF 17-SEP-2002; 2002WO-IB004210.
XX
PR 17-SEP-2001; 2001FR-00011979.
XX
PA (MOLE-) MOLECULAR ENGINES LAB.
XX
PI Telerman A, Amson R, Tuijnder M;
XX
WPI; 2003-333167/31.
XX
New isolated nucleic acid, useful for treating viral diseases associated
XX with tumors and cell degeneration, also related polypeptides, antibodies
XX and transfected cells.
XX
PS Disclosure; Page 258; 738pp; French.
XX
The present invention relates to murine oligonucleotides (ACC62754-
XX ACC68806), which are associated with tumour suppression, tumour
XX reversion, apoptosis and virus resistance. The oligonucleotides are
XX useful as (1) as probes and primers for detecting, identifying,
XX quantifying and/or amplifying nucleic acid, e.g. as one component of a
XX gene chip; in vitro as (anti)sense reagents; and (2) for production of
XX recombinant polypeptides. The oligonucleotides are useful for preparation
XX of pharmaceuticals for prevention and/or treatment of viral diseases that
XX are characterised by development of tumours or cell degeneration,
XX specifically cancer but also Alzheimer's disease and schizoprenia
XX
SQ Sequence 17 BP; 2 A; 2 C; 6 G; 7 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1289 CCCACAAGCCACAGAGC 1305
Db 17 CCCATAAGACACAGATC 1
|||||:|||||:|

RESULT 712
ACC66686
ID ACC66686 standard; DNA; 17 BP.
XX
AC ACC66686;
XX
DT 01-JUL-2003 (first entry)
XX
DE Murine oligonucleotide associated with tumour suppression, SEQ ID 3933.
XX
KW Cytostatic; virucide; neuroprotective; nontropic; neuroleptic; murine;
KW tumour suppression; tumour reversion; apoptosis; virus resistance;
KW viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizoprenia; ss.
XX
OS Mus musculus.
XX
PN WO2003025176-A2.
XX
PD 27-MAR-2003.
XX
PF 17-SEP-2002; 2002WO-IB004210.
XX
PR 17-SEP-2001; 2001FR-00011979.
XX
PA (MOLE-) MOLECULAR ENGINES LAB.
XX
PI Telerman A, Amson R, Tuijnder M;
XX
WPI; 2003-333167/31.
XX
New isolated nucleic acid, useful for treating viral diseases associated
XX with tumors and cell degeneration, also related polypeptides, antibodies
XX and transfected cells.
XX
PS Disclosure; Page 490; 738pp; French.
XX
The present invention relates to murine oligonucleotides (ACC62754-
XX ACC68806), which are associated with tumour suppression, tumour
XX reversion, apoptosis and virus resistance. The oligonucleotides are
XX useful as (1) as probes and primers for detecting, identifying,
XX quantifying and/or amplifying nucleic acid, e.g. as one component of a
XX gene chip; in vitro as (anti)sense reagents; and (2) for production of
XX recombinant polypeptides. The oligonucleotides are useful for preparation
XX of pharmaceuticals for prevention and/or treatment of viral diseases that
XX are characterised by development of tumours or cell degeneration,
XX specifically cancer but also Alzheimer's disease and schizoprenia
XX
SQ Sequence 17 BP; 2 A; 6 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```

QY 981 GCTCTACTCCATTCGTT 997  
DB 1 GATCTCTCCATTCGCT 17

RESULT 713  
AC68289/c  
ID ACC68289 standard; DNA; 17 BP.  
XX AC  
AC ACC68289;  
XX AC  
XX 01-JUL-2003 (first entry)  
XX DE Marine oligonucleotide associated with tumour suppression, SEQ ID 5536.  
XX CYTOSTATIC; VIRUCIDE; NEUROPROTECTIVE; NOTROPIC; NEUROLEPTIC; MURINE;  
KW Tumour suppression; tumour reversion; apoptosis; virus resistance;  
KW viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;  
KW schizophrenia; ss.  
XX OS Mus musculus.  
XX XX  
XX W02003025176-A2.  
XX XX  
XX 27-MAR-2003.  
XX XX  
XX 17-SEP-2002; 2002WO-IB004210.  
XX XX  
XX 17-SEP-2001; 2001FR-00011979.  
XX XX  
XX (MOLE-) MOLECULAR ENGINES LAB.  
XX PA  
XX Telerman A, Amson R, Tuijnder M;  
XX WPI; 2003-333167/31.  
XX DR  
XX New isolated nucleic acid, useful for treating viral diseases associated  
XX with tumors and cell degeneration, also related polypeptides, antibodies  
XX and transfected cells.  
XX PT  
XX Disclosure; Page 678; 738pp; French.

QY The present invention relates to murine oligonucleotides (ACC62754-  
AC68806), which are associated with tumour suppression, tumour  
reversion, apoptosis and virus resistance. The oligonucleotides are  
useful as (1) as probes and primers for detecting, identifying,  
quantifying and/or amplifying nucleic acid, e.g. as one component of a  
gene chip; in vitro as (anti)sense reagents; and (2) for production of  
recombinant polypeptides. The oligonucleotides are useful for preparation  
of pharmaceuticals for prevention and/or treatment of viral diseases that  
are characterised by development of tumours or cell degeneration,  
specifically cancer but also Alzheimer's disease and schizophrenia  
XX  
XX Sequence 17 BP; 5 A; 1 C; 6 G; 5 T; 0 U; 0 Other;  
SQ

Query Match 0.6%; Score 12.2; DB 1; Length 17;  
Best Local Similarity 82.4%; Pred. No. 5.9e+02;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1123 AGTTCACCTTCACCTC 1139  
DB 17 AATTCACCTTCAGATC 1

RESULT 714  
ACH00302  
ID ACH00302 standard; DNA; 17 BP.  
XX AC  
ACH00302;  
XX AC  
XX 06-NOV-2003 (first entry)  
XX DT  
XX XX

Forward primer used to make oligonucleotide tag #1 double-stranded.  
Oligonucleotide tag; ss; amplicon; word; cross-hybridising; error-free;  
disease-related polynucleotide; diagnostic assay; therapeutic block;  
sequencing; primer.  
Synthetic.  
US2003049616-A1.  
13-MAR-2003.  
08-JAN-2001; 2001US-00756830.  
08-JAN-2001; 2001US-00756830.  
(BREN/) BRENNER S.  
(WILL/) WILLIAMS S R.  
Brenner S, Williams SR;  
WPI; 2003-567061/53.  
Synthesizing a repertoire of oligonucleotide tags of a predetermined  
length, useful in diagnostic assays or DNA sequencing, by employing error  
-free words or oligonucleotides selected from the same minimally cross-  
hybridizing set.  
Disclosure; Page 5; 22pp; English.

The invention discloses a method for synthesising a repertoire of  
oligonucleotide tags of a predetermined length. The method comprises  
providing a repertoire of oligonucleotide tag precursors in an amplicon,  
where the oligonucleotide tag precursors each comprises one or more words  
(oligonucleotides, between 3 to 14 nucleotides in length, that differ  
from every other member of the same set by at least 2 nucleotides), and  
each word is selected from the same minimally cross-hybridising set,  
cleaving the amplicon at a word in each of the oligonucleotide tag  
precursors to form one or more ligatable ends on each oligonucleotide tag  
precursor, ligating one or more words to the ligatable end(s) to elongate  
each of the oligonucleotide tag precursors, amplifying the elongated  
oligonucleotide tag precursors in the amplicon and then repeating these  
steps until a repertoire of oligonucleotide tags, having predetermined  
length, is formed. The method is useful for synthesising repertoires of  
error-free oligonucleotide tags that may be used for labelling and  
sorting polynucleotides, such as cDNAs or restriction fragments. The  
method is particularly useful in a wide variety of research, medical or  
industrial applications, including the identification of disease-related  
polynucleotides in diagnostic assays, screening for clones of novel  
target polynucleotides, amplification of specifically expressed genes and DNA  
therapeutic blocking of inappropriately expressed genes are free of failure  
sequences. Sampled and amplified tag-polynucleotide conjugates are  
assured of finding a tag complement with which to form a perfectly  
matched duplex. The sequence presented is a primer which was used to make  
the minimally cross-hybridising oligonucleotide tag #1 double-stranded  
XX  
XX Sequence 17 BP; 5 A; 5 C; 6 G; 1 T; 0 U; 0 Other;  
SQ

Query Match 0.6%; Score 12.2; DB 1; Length 17;  
Best Local Similarity 82.4%; Pred. No. 5.9e+02;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1007 CGACACCTTGAAAAAGAG 1023  
DB 1 CGACACCTGCAGAGGAG 17

RESULT 715  
ADB43899  
ID ADB43899 standard; DNA; 17 BP.  
XX ADB43899;  
XX AC



```
XX 18-DEC-2003 (revised)
DT 04-DEC-2003 (first entry)
XX Tumour suppression/reversion associated nucleotide #4222.
KW cytostatic; antiviral; neuroprotective; nontropic; neuroleptic; ss;
KW primer; probe; tumour suppression; tumour reversion; apoptosis;
KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
KW diagnosis.
XX Homo sapiens.
OS WO2003040369-A2.
XX
XX PD 15-MAY-2003.
XX
XX PF 17-SEP-2002; 2002WO-IB004219.
XX
XX PR 17-SEP-2001; 2001FR-00011981.
XX
XX PA (MOLE-) MOLECULAR ENGINES LAB.
XX
XX PI Telerman A, Amson R, Tuijnder M;
XX
XX DR WPI; 2003-441574/41.
XX
XX PT New nucleic acid encoding human prostate membrane-specific antigen,
XX useful e.g. for treatment of tumors and viral infection, also related
XX polypeptide and antibodies.
XX
XX PS Disclosure; Page 525; 77lpp; French.
XX
XX CC The invention relates to the isolation of 6327 nucleotide sequences,
XX fragments of at least 15 consecutive nucleotides of these nucleotides, a
XX sequence having at least 80% identity, after optimal alignment, with the
XX nucleotides, a sequence that hybridizes under stringent conditions with
XX the nucleotides, or the complement, or corresponding RNA, of the
XX nucleotides. The nucleotides are used as probes or primers for detecting,
XX identifying, quantifying and/or amplifying nucleic acids, as in vitro
XX sense and antisense sequences, of nucleotides involved in tumour
XX suppression or reversion, apoptosis and or viral resistance, to produce
XX recombinant polypeptides, and to prepare transgenic animals, as
XX experimental models. The nucleotides (also vectors containing them and
XX cells containing the vectors), the encoded polypeptides and antibodies
XX (Ab) against the polypeptide are useful for prevention and/or treatment
XX of viral infections or diseases characterized by development of tumours
XX or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
XX Analysis of the expression of the nucleotides can be used for diagnosis
XX and/or prognosis of these diseases. The nucleotides and polypeptides can
XX also be used to screen for their specific interactive molecules,
XX potentially useful for treating diseases associated with abnormal
XX expression of the nucleotides.
XX
XX SQ Sequence 17 BP; 3 A; 3 C; 4 G; 7 T; 0 U; 0 Other;
Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 903 GGTCAATTTCTTTGGTC 919
DB 1 GATCAATTTCTTGGAC 17
RESULT 716
ADB42956/c
ID ADB42956 standard; DNA; 17 BP.
XX
XX AC ADB42956;
XX
XX 18-DEC-2003 (revised)
DT 04-DEC-2003 (first entry)
```

```
XX Tumour suppression/reversion associated nucleotide #3279.
DE cytostatic; antiviral; neuroprotective; nontropic; neuroleptic; ss;
XX primer; probe; tumour suppression; tumour reversion; apoptosis;
KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
KW diagnosis.
XX Homo sapiens.
OS WO2003040369-A2.
XX
XX PN 15-MAY-2003.
XX
XX PD 17-SEP-2002; 2002WO-IB004219.
XX
XX PF 17-SEP-2001; 2001FR-00011981.
XX
XX PR (MOLE-) MOLECULAR ENGINES LAB.
XX
XX PA Telerman A, Amson R, Tuijnder M;
XX
XX PI WPI; 2003-441574/41.
XX
XX DR New nucleic acid encoding human prostate membrane-specific antigen,
XX useful e.g. for treatment of tumors and viral infection, also related
XX polypeptide and antibodies.
XX
XX PS Disclosure; Page 415; 77lpp; French.
XX
XX CC The invention relates to the isolation of 6327 nucleotide sequences,
XX fragments of at least 15 consecutive nucleotides of these nucleotides, a
XX sequence having at least 80% identity, after optimal alignment, with the
XX nucleotides, a sequence that hybridizes under stringent conditions with
XX the nucleotides, or the complement, or corresponding RNA, of the
XX nucleotides. The nucleotides are used as probes or primers for detecting,
XX identifying, quantifying and/or amplifying nucleic acids, as in vitro
XX sense and antisense sequences, of nucleotides involved in tumour
XX suppression or reversion, apoptosis and or viral resistance, to produce
XX recombinant polypeptides, and to prepare transgenic animals, as
XX experimental models. The nucleotides (also vectors containing them and
XX cells containing the vectors), the encoded polypeptides and antibodies
XX (Ab) against the polypeptide are useful for prevention and/or treatment
XX of viral infections or diseases characterized by development of tumours
XX or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
XX Analysis of the expression of the nucleotides can be used for diagnosis
XX and/or prognosis of these diseases. The nucleotides and polypeptides can
XX also be used to screen for their specific interactive molecules,
XX potentially useful for treating diseases associated with abnormal
XX expression of the nucleotides.
XX
XX SQ Sequence 17 BP; 3 A; 6 C; 1 G; 7 T; 0 U; 0 Other;
Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1014 TGAAGAAGAGGGGAGC 1030
DB 17 TGAATAATGAGGGAGATC 1
RESULT 717
ADB39715/c
ID ADB39715 standard; DNA; 17 BP.
XX
XX AC ADB39715;
XX
XX 18-DEC-2003 (revised)
DT 04-DEC-2003 (first entry)
XX
XX Tumour suppression/reversion associated nucleotide #38.
DE
```

KW cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;  
 KW primer; probe; tumour suppression; tumour reversion; apoptosis;  
 KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;  
 KW diagnosis.  
 XX Homo sapiens.  
 OS  
 XX WO2003040369-A2.  
 PN  
 XX 15-MAY-2003.  
 PD  
 XX 17-SEP-2002; 2002WO-IB004219.  
 PF  
 XX 17-SEP-2001; 2001FR-00011981.  
 PR  
 XX (MOLE-) MOLECULAR ENGINES LAB.  
 PA  
 XX Telerman A, Amson R, Tuijnder M;  
 PI  
 XX WPI; 2003-441574/41.  
 DR  
 XX New nucleic acid encoding human prostate membrane-specific antigen,  
 PT useful e.g. for treatment of tumors and viral infection, also related  
 PT polypeptide and antibodies.  
 PS Disclosure; Page 36; 771pp; French.  
 XX  
 CC The invention relates to the isolation of 6327 nucleotide sequences,  
 CC fragments of at least 15 consecutive nucleotides of these nucleotides, a  
 CC sequence having at least 80% identity, after optimal alignment, with the  
 CC nucleotides, a sequence that hybridizes under stringent conditions with  
 CC the nucleotides, or the complement, or corresponding RNA, of the  
 CC nucleotides. The nucleotides are used as probes or primers for detecting,  
 CC identifying, quantifying and/or amplifying nucleic acids, as in vitro  
 CC sense and antisense sequences, of nucleotides involved in tumour  
 CC suppression or reversion, apoptosis and or viral resistance, to produce  
 CC recombinant polypeptides, and to prepare transgenic animals, as  
 CC experimental models. The nucleotides (also vectors containing them and  
 CC cells containing the vectors), the encoded polypeptides and antibodies  
 CC (Ab) against the polypeptide are useful for prevention and/or treatment  
 CC of viral infections or diseases characterized by development of tumours  
 CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).  
 CC Analysis of the expression of the nucleotides can be used for diagnosis  
 CC and/or prognosis of these diseases. The nucleotides and polypeptides can  
 CC also be used to screen for their specific interactive molecules,  
 CC potentially useful for treating diseases associated with abnormal  
 CC expression of the nucleotides.  
 XX  
 SQ Sequence 17 BP; 1 A; 1 C; 8 G; 7 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 12.2; DB 1; Length 17;  
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;  
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1289 CCCACAGCCACAGC 1305  
 Db 17 CCCACACACACAGATC 1  
 RESULT 718  
 ADC04003  
 ID ADC04003 standard; DNA; 17 BP.  
 XX  
 AC ADC04003;  
 XX  
 DT 18-DEC-2003 (first entry)  
 XX  
 DE Human Na/H exchanger-like protein 1 gene oligonucleotide #450.  
 XX  
 KW ss: gene therapy; vaccine; sodium/hydrogen exchanger like protein;  
 KW NHEPL1; passive replacement therapy; vaccine; diagnosis.  
 XX  
 OS Homo sapiens.

XX EP1273660-A2.  
 PN  
 XX 08-JAN-2003.  
 PD  
 XX 25-JAN-2002; 2002EP-00001160.  
 PF  
 XX 30-JAN-2001; 2001WO-US000666.  
 PR  
 XX 23-MAY-2001; 2001US-00864761.  
 PR  
 XX 21-DEC-2001; 2001US-0343331P.  
 XX  
 PA (AEOM-) AEOMICA INC.  
 XX  
 XX Gu Y;  
 PI  
 XX WPI; 2003-302724/30.  
 DR  
 XX New human sodium-hydrogen exchanger like protein 1 (NHEPL1), useful as a  
 PT passive replacement therapy or as a vaccine for treating or preventing  
 PT disorders associated with aberrant expression or activity of human  
 PT NHEPL1.  
 XX  
 PS Example 2; SEQ ID NO 490; 468pp; English.  
 XX  
 CC The invention relates to a nucleic acid molecule which encodes a Na+/H+  
 CC exchanger like protein (NHEPL1). The NHEPL1 nucleic acid molecule, NHEPL1  
 CC polypeptide, an antibody against the protein or its antigen-binding  
 CC fragment is useful in therapy. The NHEPL1 nucleic acid molecule, NHEPL1  
 CC polypeptide and an agonist are particularly useful for manufacturing a  
 CC medicament for treating or preventing a disorder associated with  
 CC decreased expression or activity of human NHEPL1. The antibody or its  
 CC antigen-binding fragment, and an antagonist, are useful for manufacturing  
 CC a medicament for treating or preventing a disorder associated with  
 CC increased expression or activity of human NHEPL1. The NHEPL1 nucleic acid  
 CC or protein is useful as passive replacement therapy, as a vaccine, or in  
 CC diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide  
 CC spanning the sequence of the human NHEPL1 gene (ADC03514).  
 XX  
 SQ Sequence 17 BP; 3 A; 3 C; 2 G; 9 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 12.2; DB 1; Length 17;  
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;  
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 938 TCTTCATTTGGTTTAAATG 954  
 Db 1 TCTTCATGTTTACTG 17  
 RESULT 719  
 ADC03563  
 ID ADC03563 standard; DNA; 17 BP.  
 XX  
 AC ADC03563;  
 XX  
 DT 18-DEC-2003 (first entry)  
 XX  
 DE Human Na/H exchanger-like protein 1 gene oligonucleotide #10.  
 XX  
 KW ss: gene therapy; vaccine; sodium/hydrogen exchanger like protein;  
 KW NHEPL1; passive replacement therapy; vaccine; diagnosis.  
 XX  
 OS Homo sapiens.  
 XX  
 PN EP1273660-A2.  
 XX  
 PD 08-JAN-2003.  
 PF  
 XX 25-JAN-2002; 2002EP-00001160.  
 PR  
 XX 30-JAN-2001; 2001WO-US000666.  
 PR  
 XX 23-MAY-2001; 2001US-00864761.  
 PR  
 XX 21-DEC-2001; 2001US-0343331P.  
 PR

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XX (AEOM-) AEOMICA INC.
PA
XX
XX Gu Y;
XX WPI; 2003-302724/30.
XX
XX New human sodium-hydrogen exchanger like protein 1 (NHEPL1), useful as a
PT passive replacement therapy or as a vaccine for treating or preventing
PT disorders associated with aberrant expression or activity of human
PT NHEPL1.
XX
XX Example 2; SEQ ID NO 50; 468pp; English.
XX
XX The invention relates to a nucleic acid molecule which encodes a Na+/H+
CC exchanger like protein (NHEPL1). The NHEPL1 nucleic acid molecule, NHEPL1
CC polypeptide, an antibody against the protein or its antigen-binding
CC fragment is useful in therapy. The NHEPL1 nucleic acid molecule, NHEPL1
CC polypeptide and an agonist are particularly useful for manufacturing a
CC medicament for treating or preventing a disorder associated with
CC decreased expression or activity of human NHEPL1. The antibody or its
CC antigen-binding fragment, and an antagonist, are useful for manufacturing
CC a medicament for treating or preventing a disorder associated with
CC increased expression or activity of human NHEPL1. The NHEPL1 nucleic acid
CC or protein is useful as passive replacement therapy, as a vaccine, or in
CC diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide
CC spanning the sequence of the human NHEPL1 gene (ADC03514).
XX
SQ Sequence 17 BP; 4 A; 3 C; 2 G; 8 T; 0 U; 0 Other;
Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 761 ATCCAGGTTTCTTCTA 777
Db 1 ATCCAGGTTTCTTCTA 17
|| ||||| ||||
1 ATCCAGGTTTCTTCTA 17

RESULT 720
ADC04000
ID ADC04000 standard; DNA; 17 BP.
XX
XX ADC04000;
XX
XX 18-DEC-2003 (first entry)
XX
XX Human Na/H exchanger-like protein 1 gene oligonucleotide #447.
XX
XX ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein;
XX NHEPL1; passive replacement therapy; vaccine; diagnosis.
XX
XX Homo sapiens.
XX
XX EP1273660-A2.
XX
XX 08-JAN-2003.
XX
XX 25-JAN-2002; 2002EP-00001160.
XX
XX 30-JAN-2001; 2001WO-US000666.
XX
XX 23-MAY-2001; 2001US-00864761.
XX
XX 21-DEC-2001; 2001US-0343331P.
XX
XX (AEOM-) AEOMICA INC.
XX
XX Gu Y;
XX
XX WPI; 2003-302724/30.
XX
XX New human sodium-hydrogen exchanger like protein 1 (NHEPL1), useful as a
PT passive replacement therapy or as a vaccine for treating or preventing
PT disorders associated with aberrant expression or activity of human
PT NHEPL1.
XX
XX Example 2; SEQ ID NO 51; 468pp; English.
XX
XX The invention relates to a nucleic acid molecule which encodes a Na+/H+
CC exchanger like protein (NHEPL1). The NHEPL1 nucleic acid molecule, NHEPL1
CC polypeptide, an antibody against the protein or its antigen-binding
CC fragment is useful in therapy. The NHEPL1 nucleic acid molecule, NHEPL1
CC polypeptide and an agonist are particularly useful for manufacturing a
CC medicament for treating or preventing a disorder associated with
CC decreased expression or activity of human NHEPL1. The antibody or its
CC antigen-binding fragment, and an antagonist, are useful for manufacturing
CC a medicament for treating or preventing a disorder associated with
CC increased expression or activity of human NHEPL1. The NHEPL1 nucleic acid
CC or protein is useful as passive replacement therapy, as a vaccine, or in
CC diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide
CC spanning the sequence of the human NHEPL1 gene (ADC03514).
XX
SQ Sequence 17 BP; 3 A; 3 C; 1 G; 10 T; 0 U; 0 Other;
Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 935 TCCTCTTCATTTGGTTTA 951
Db 1 TCCTCTTCATTTGGTTTA 17
|| ||||| |||||
1 TCCTCTTCATTTGGTTTA 17

RESULT 721
ADC03564
ID ADC03564 standard; DNA; 17 BP.
XX
XX ADC03564;
XX
XX 18-DEC-2003 (first entry)
XX
XX Human Na/H exchanger-like protein 1 gene oligonucleotide #11.
XX
XX ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein;
XX NHEPL1; passive replacement therapy; vaccine; diagnosis.
XX
XX Homo sapiens.
XX
XX EP1273660-A2.
XX
XX 08-JAN-2003.
XX
XX 25-JAN-2002; 2002EP-00001160.
XX
XX 30-JAN-2001; 2001WO-US000666.
XX
XX 23-MAY-2001; 2001US-00864761.
XX
XX 21-DEC-2001; 2001US-0343331P.
XX
XX (AEOM-) AEOMICA INC.
XX
XX Gu Y;
XX
XX WPI; 2003-302724/30.
XX
XX New human sodium-hydrogen exchanger like protein 1 (NHEPL1), useful as a
PT passive replacement therapy or as a vaccine for treating or preventing
PT disorders associated with aberrant expression or activity of human
PT NHEPL1.
XX
XX Example 2; SEQ ID NO 51; 468pp; English.
XX
XX The invention relates to a nucleic acid molecule which encodes a Na+/H+
CC exchanger like protein (NHEPL1). The NHEPL1 nucleic acid molecule, NHEPL1
CC polypeptide, an antibody against the protein or its antigen-binding
CC fragment is useful in therapy. The NHEPL1 nucleic acid molecule, NHEPL1
CC polypeptide and an agonist are particularly useful for manufacturing a
CC medicament for treating or preventing a disorder associated with
CC decreased expression or activity of human NHEPL1. The antibody or its
CC antigen-binding fragment, and an antagonist, are useful for manufacturing
CC a medicament for treating or preventing a disorder associated with
CC increased expression or activity of human NHEPL1. The NHEPL1 nucleic acid
CC or protein is useful as passive replacement therapy, as a vaccine, or in
CC diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide
CC spanning the sequence of the human NHEPL1 gene (ADC03514).
XX
SQ Sequence 17 BP; 3 A; 3 C; 1 G; 10 T; 0 U; 0 Other;
Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 935 TCCTCTTCATTTGGTTTA 951
Db 1 TCCTCTTCATTTGGTTTA 17
|| ||||| |||||
1 TCCTCTTCATTTGGTTTA 17

```

CC decreased expression or activity of human NHEP1. The antibody or its  
 CC antigen-binding fragment, and an antagonist, are useful for manufacturing  
 CC a medicament for treating or preventing a disorder associated with  
 CC increased expression or activity of human NHEP1. The NHEP1 nucleic acid  
 CC or protein is useful as passive replacement therapy, as a vaccine, or in  
 CC diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide  
 CC spanning the sequence of the human NHEP1 gene (ADC03514).

XX Sequence 17 BP; 4 A; 3 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;  
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;  
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 762 TGCAGGTTTCTTCTAA 778  
 Db 1 TCCAGGTTTCTTCTAA 17

RESULT 722  
 ADB45316  
 ID ADB45316 standard; DNA; 17 BP.

XX AC ADB45316;

XX DT 18-DEC-2003 (first entry)

XX DE Tumour suppression/reversion associated nucleotide #5639.

XX KW cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;

XX KW primer; probe; tumour suppression; tumour reversion; apoptosis;

XX KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;  
 XX diagnosis.

XX OS Homo sapiens.

XX PN WO2003040369-A2.

XX PD 15-MAY-2003.

XX PF 17-SEP-2002; 2002WO-IB004219.

XX PR 17-SEP-2001; 2001FR-00011981.

XX PA (MOLE-) MOLECULAR ENGINES LAB.

XX PI Teerman A, Amson R, Tuijnder M;

XX DR WPI; 2003-441574/41.

XX PT New nucleic acid encoding human prostate membrane-specific antigen,  
 XX useful e.g. for treatment of tumors and viral infection, also related  
 XX polypeptide and antibodies.

XX PS Disclosure; Page 691; 771pp; French.

XX The invention relates to the isolation of 6327 nucleotide sequences,  
 CC fragments of at least 15 consecutive nucleotides of these nucleotides, a  
 CC sequence having at least 80% identity, after optimal alignment, with the  
 CC nucleotides, a sequence that hybridizes under stringent conditions with  
 CC the nucleotides, or the complement, or corresponding RNA, of the  
 CC nucleotides. The nucleotides are used as probes or primers for detecting,  
 CC identifying, quantifying and/or amplifying nucleic acids, as in vitro  
 CC sense and antisense sequences, of nucleotides involved in tumour  
 CC suppression or reversion, apoptosis and or viral resistance, to produce  
 CC recombinant polypeptides, and to prepare transgenic animals, as  
 CC experimental models. The nucleotides (also vectors containing them and  
 CC cells containing the vectors), the encoded polypeptides and antibodies  
 CC (Ab) against the polypeptide are useful for prevention and/or treatment  
 CC of viral infections or diseases characterized by development of tumours  
 CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).  
 CC Analysis of the expression of the nucleotides can be used for diagnosis  
 CC and/or prognosis of these diseases. The nucleotides and polypeptides can

CC also be used to screen for their specific interactive molecules,  
 CC potentially useful for treating diseases associated with abnormal  
 CC expression of the nucleotides.

XX Sequence 17 BP; 1 A; 6 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;  
 Best Local Similarity 82.4%; Pred. No. 5.9e+02;  
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 981 GCTCTACTCCATTGTTT 997  
 Db 1 GATCTCTCCCTGTTT 17

RESULT 723  
 ADE40364/C  
 ID ADE40364 standard; DNA; 17 BP.

XX AC ADE40364;

XX DT 29-JAN-2004 (first entry)

XX DE Reverse Ag7016 RT-PCR primer used to amplify human NOV RNA.

XX KW NOVX; cardiac; antiarteriosclerotic; hypotensive; cytostatic; anorectic;  
 KW antidiabetic; immunosuppressive; anti-HIV; neuroprotective; nootropic;  
 KW antiparkinsonian; antiasthmatic; gynaecological; cardiomyopathy;  
 KW atherosclerosis; hypertension; cancer; obesity; diabetes; AIDS;  
 KW multiple sclerosis; graft-versus-host disease; Alzheimer's; Parkinson's;  
 KW asthma; fertility disorder; vaccine; gene therapy; chromosome mapping;  
 KW tissue typing; human; NOV; ss; primer; PCR; RT-PCR.

XX OS Homo sapiens.

XX PN WO2003064589-A2.

XX PD 07-AUG-2003.

XX PF 02-AUG-2002; 2002WO-US024483.

XX PR 02-AUG-2001; 2001US-0309501P.

XX PR 03-AUG-2001; 2001US-0310291P.

XX PR 07-AUG-2001; 2001US-0310544P.

XX PR 08-AUG-2001; 2001US-0310951P.

XX PR 09-AUG-2001; 2001US-0311292P.

XX PR 13-AUG-2001; 2001US-0311979P.

XX PR 16-AUG-2001; 2001US-0312892P.

XX PR 17-AUG-2001; 2001US-0313201P.

XX PR 17-AUG-2001; 2001US-0313415P.

XX PR 20-AUG-2001; 2001US-0313643P.

XX PR 20-AUG-2001; 2001US-0313702P.

XX PR 21-AUG-2001; 2001US-0314031P.

XX PR 23-AUG-2001; 2001US-0314466P.

XX PR 28-AUG-2001; 2001US-0315403P.

XX PR 29-AUG-2001; 2001US-0315853P.

XX PR 17-SEP-2001; 2001US-0322716P.

XX PR 21-SEP-2001; 2001US-0323994P.

XX PR 14-DEC-2001; 2001US-0340233P.

XX PR 05-FEB-2002; 2002US-0354591P.

XX PR 19-MAR-2002; 2002US-0365478P.

XX PR 19-APR-2002; 2002US-0373814P.

XX PR 19-APR-2002; 2002US-0373825P.

XX PR 19-APR-2002; 2002US-0373989P.

XX PR 23-APR-2002; 2002US-0374632P.

XX PR 07-JUN-2002; 2002US-0386971P.

XX PR 01-AUG-2002; 2002US-00210172.

XX (CURA-) CURAGEN CORP.

XX Kekuda R, Miller CE, Patturajan M, Pena CEA, Rieger DK;

PI Shinkets RA, Zerhusen BD, Li L, Ji W, Padigaru M, Casman SJ;

PI Voss EZ, Boldog FL, Gorman L, Leite MW, Vernet CM, Anderson DW;

PI Guo X, Zhong M, Gerlach VL, Hjalte T, Rastelli L, Spytek KA;  
PI Edinger SR, Ellerman K, Malyankar UM, Macdougall JR, Stone DJ;  
PI Albrock JP, Lepley DM, Burgess CE, Majumder K, Wolenc AR;  
PI Smithson G;  
XX WPI; 2003-663472/62.  
XX  
XX New NOVX polypeptides and nucleic acids, useful for preventing or  
PT treating NOVX-associated disorders, e.g. cancer, cardiomyopathy,  
PT atherosclerosis or diabetes, and in chromosome mapping, tissue typing or  
PT pharmacogenomics.  
XX  
XX Example C; SEQ ID NO 270; 560pp; English.  
XX  
XX The invention relates to a novel NOVX polypeptide. The polypeptide of the  
CC invention demonstrates cardant, antiarteriosclerotic, hypotensive,  
CC cyostatic, anorectic, antidiabetic, immunosuppressive, anti-HIV,  
CC neuroprotective, nootropic, antiparkinsonian, antisthmatic and  
CC gynaecological activities and may be useful in diagnosing, treating or  
CC preventing NOVX-associated disorders including cardiomyopathy,  
CC atherosclerosis, hypertension, cancer, obesity, diabetes, AIDS, multiple  
CC sclerosis, graft-versus-host disease, Alzheimer's disease, Parkinson's  
CC disease, asthma or fertility disorders. Furthermore, the polypeptides may  
CC be utilised as vaccines whilst the nucleic acids may be used as  
CC hybridisation probes, in gene therapy, chromosome mapping, tissue typing,  
CC preventive medicine and pharmacogenomics. The current sequence is that of  
CC the RT-PCR primer of the invention which was used to amplify human NOV  
CC RNA.  
XX  
XX Sequence 17 BP; 2 A; 3 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;  
Best Local Similarity 82.4%; Pred. No. 5.9e+02;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 971 GGAAGTCCAGCTCTAC 987

Db 17 GGAAGTCCAGCTCTAC 1

## RESULT 724

ABT05120

ID ABT05120 standard; DNA; 18 BP.

XX AC ABT05120;

XX XX

XX 11-OCT-2002 (first entry)

XX XX

XX TNFR1 expression modulation related antisense oligo SEQ ID No 150.

XX Antisense compound; tumour necrosis factor receptor 1; liver disease;

XX TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;

XX human; ds.

XX Homo sapiens.

XX WO200248168-A1.

XX 20-JUN-2002.

XX 22-OCT-2001; 2001WO-US051224.

XX 24-OCT-2000; 2000US-00695451.

XX (ISIS-) ISIS PHARM INC.

XX Baker BF, Cowsett LM, Zhang H, Dean NM;

XX WPI; 2002-583481/62.

XX Novel antisense compound targeted to nucleic acid molecule encoding tumor

XX necrosis factor receptor 1 (TNFR1), useful for treating humans having

XX disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.

XX Example 18; Page 56; 121pp; English.  
XX  
XX The invention relates to an antisense compound 8 to 30 nucleotides in  
CC length targeted to nucleic acid molecule encoding tumour necrosis factor  
CC receptor 1 (TNFR1), where the antisense compound inhibits expression of  
CC TNFR1. The antisense compound is useful for inhibiting the expression of  
CC TNFR1 in cells or tissues. The antisense compound is also useful for  
CC treating an animal (preferably human) having a disease or condition  
CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver  
CC injury) or a hyperproliferative disorder such as cancer, by inhibiting  
CC the expression of TNFR1. The antisense compound is useful for  
CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.  
CC This polynucleotide sequence represents a human oligonucleotide relating  
CC to the TNFR1 of the invention  
XX  
XX Sequence 18 BP; 5 A; 2 C; 9 G; 2 T; 0 U; 0 Other;

Query Match 0.6%; Score 12.2; DB 1; Length 18;  
Best Local Similarity 82.4%; Pred. No. 7e+02;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1416 GCTGGAGCTGCAGACG 1432

Db 2 GCTGGAGCTGCAGACG 18

## RESULT 725

ABT05119

ID ABT05119 standard; DNA; 18 BP.

XX AC ABT05119;

XX XX

XX 11-OCT-2002 (first entry)

XX XX

XX TNFR1 expression modulation related antisense oligo SEQ ID No 149.

XX Antisense compound; tumour necrosis factor receptor 1; liver disease;

XX TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;

XX human; ds.

XX Homo sapiens.

XX WO200248168-A1.

XX 20-JUN-2002.

XX 22-OCT-2001; 2001WO-US051224.

XX 24-OCT-2000; 2000US-00695451.

XX (ISIS-) ISIS PHARM INC.

XX Baker BF, Cowsett LM, Zhang H, Dean NM;

XX WPI; 2002-583481/62.

XX Novel antisense compound targeted to nucleic acid molecule encoding tumor  
XX necrosis factor receptor 1 (TNFR1), useful for treating humans having  
XX disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.

XX Example 18; Page 56; 121pp; English.

XX The invention relates to an antisense compound 8 to 30 nucleotides in  
XX length targeted to nucleic acid molecule encoding tumour necrosis factor  
XX receptor 1 (TNFR1), where the antisense compound inhibits expression of  
XX TNFR1. The antisense compound is useful for inhibiting the expression of  
XX TNFR1 in cells or tissues. The antisense compound is also useful for  
XX treating an animal (preferably human) having a disease or condition  
XX associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver  
XX injury) or a hyperproliferative disorder such as cancer, by inhibiting  
XX the expression of TNFR1. The antisense compound is useful for  
XX diagnostics, therapeutics, prophylaxis and as research reagents and kits.

```
CC This polynucleotide sequence represents a human oligonucleotide relating
CC to the TNFR1 of the invention
XX
SQ Sequence 18 BP; 4 A; 2 C; 9 G; 3 T; 0 U; 0 Other;
    Query Match      0.6%; Score 12.2; DB 1; Length 18;
    Best Local Similarity 82.4%; Pred. No. 7e+02;
    Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1417 CTGGAGCTGCAGACGG 1433
    ||||| |||||
Db 1 CTGGAGCTGAAGGACGG 17

RESULT 726
ABK30573
ID ABK30573 standard; DNA; 20 BP.
XX
AC ABK30573;
XX
DT 23-APR-2002 (first entry)
XX
DE Human glioma-associated oncogene-1 antisense oligonucleotide ISIS 124905.
XX
KW Human; glioma-associated oncogene-1 associated disease; infection;
KW inflammation; tumour formation; cytostatic; antiinflammatory; antisense;
KW phosphorothioate; ss.
XX
OS Homo sapiens.
XX
PN US6329203-B1.
XX
PD 11-DEC-2001.
XX
PF 08-SEP-2000; 2000US-00657042.
XX
PR 08-SEP-2000; 2000US-00657042.
XX
PS (ISIS-) ISIS PHARM INC.
PA Bennett CF, Wyatt J;
PI WPI; 2002-138363/18.
XX
KW Novel antisense compounds targeted to nucleic acids encoding glioma-
associated oncogene-1, for modulating the gene expression and treating
PT diseases associated with expression of the oncogene in humans.
XX
PS Example 15; Col 45-46; 43pp; English.
XX
CC The present invention relates to antisense compounds and methods for
modulating the expression of human glioma-associated oncogene-1. The
CC antisense compounds, particularly antisense oligonucleotides, target and
CC inhibit the expression of human glioma-associated oncogene-1. The
CC antisense compounds are useful for inhibiting the expression of human
CC glioma-associated oncogene-1 in human cells or tissues and for treating
CC an animal, particularly a human suspected of having or being prone to a
CC disease or condition associated with expression of glioma-associated
CC oncogene-1. The compounds are useful for diagnostics, therapeutics and as
CC research reagent, e.g. prophylactically to prevent or delay infection,
CC inflammation or tumour formation. The antisense compounds are safely and
CC effectively administered to humans. ABK30509-ABK30586 represent the
CC antisense oligonucleotides of the invention which comprise a
CC phosphorothioate backbone
XX
SQ Sequence 20 BP; 3 A; 7 C; 3 G; 7 T; 0 U; 0 Other;
    Query Match      0.6%; Score 12.2; DB 1; Length 20;
    Best Local Similarity 82.4%; Pred. No. 9.3e+02;
    Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1677 CCCCACTTTTCTCGA 1693
    ||||| |||||
```

```
Db
4 CCCCAATTTTCTCGA 20

RESULT 727
ABH72006/C
ID ABH72006 standard; DNA; 12 BP.
XX
AC ABH72006;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide primer SEQ ID NO 271985 for detecting SNP TSC0002677.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
XX
PS Claim 1; SEQ ID NO 271985; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 12 BP; 3 A; 0 C; 7 G; 2 T; 0 U; 0 Other;
    Query Match      0.6%; Score 12; DB 1; Length 12;
    Best Local Similarity 100.0%; Pred. No. 2.2e+02;
    Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1129 ACCTTCACCTCC 1140
    ||||| |||||
Db 12 ACCTTCACCTCC 1

RESULT 728
ABI77091
ID ABI77091 standard; DNA; 12 BP.
XX
AC ABI77091;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide primer SEQ ID NO 377064 for detecting SNP TSC0006434.
XX
```

KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX Homo sapiens.  
 XX WO200177384-A2.  
 XX 18-OCT-2001.  
 XX 06-APR-2001; 2001WO-IB000713.  
 XX 07-APR-2000; 2000DE-01019173.  
 XX (EPIG-) EPIGENOMICS AG.  
 XX Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX Claim 1; SEQ ID NO 377064; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX Sequence 12 BP; 6 A; 3 C; 0 G; 3 T; 0 U; 0 Other;  
 XX Query Match 0.6%; Score 12; DB 1; Length 12;  
 XX Best Local Similarity 100.0%; Pred. No. 2.2e+02;  
 XX Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1038 AACTACTACTAA 1049  
 DB 1 AACTACTACTAA 12  
 RESULT 729  
 ABI39583/c  
 ID ABI39583 standard; DNA; 12 BP.  
 XX AC ABI39583;  
 XX 22-FEB-2002 (first entry)  
 XX Oligonucleotide primer SEQ ID NO 339556 for detecting SNP TSC0004850.  
 DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX Homo sapiens.  
 XX WO200177384-A2.  
 XX 18-OCT-2001.  
 XX 06-APR-2001; 2001WO-IB000713.  
 XX 07-APR-2000; 2000DE-01019173.  
 XX (EPIG-) EPIGENOMICS AG.  
 XX Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX Claim 1; SEQ ID NO 329186; 29pp + Sequence Listing; German.

XX (EPIG-) EPIGENOMICS AG.  
 XX Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX Claim 1; SEQ ID NO 339556; 29pp + Sequence Listing; German.  
 XX This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX Sequence 12 BP; 6 A; 3 C; 0 G; 3 T; 0 U; 0 Other;  
 XX Query Match 0.6%; Score 12; DB 1; Length 12;  
 XX Best Local Similarity 100.0%; Pred. No. 2.2e+02;  
 XX Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 946 GGTTTAATGTAT 957  
 DB 12 GGTTTAATGTAT 1  
 RESULT 730  
 ABI29213/c  
 ID ABI29213 standard; DNA; 12 BP.  
 XX AC ABI29213;  
 XX 22-FEB-2002 (first entry)  
 XX Oligonucleotide primer SEQ ID NO 329186 for detecting SNP TSC0034813.  
 DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX Homo sapiens.  
 XX WO200177384-A2.  
 XX 18-OCT-2001.  
 XX 06-APR-2001; 2001WO-IB000713.  
 XX 07-APR-2000; 2000DE-01019173.  
 XX (EPIG-) EPIGENOMICS AG.  
 XX Olek A, Piepenbrock C, Berlin K;  
 XX WPI; 2001-657177/75.  
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.  
 XX Claim 1; SEQ ID NO 329186; 29pp + Sequence Listing; German.

CC This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences

SQ Sequence 12 BP; 3 A; 0 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.6%; Score 12; DB 1; Length 12;  
Best Local Similarity 100.0%; Pred. No. 2.2e+02;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1038 AACTACTACTAA 1049  
DB 12 AACTACTACTAA 1  
|||||

RESULT 731  
ABI42556/c  
ID ABI42556 standard; DNA; 12 BP.  
XX AC ABI42556;  
XX DT 22-FEB-2002 (first entry)  
XX DE Oligonucleotide primer SEQ ID NO 342529 for detecting SNP TSC0005562.  
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX OS Homo sapiens.  
XX PN WO200177384-A2.  
XX PD 18-OCT-2001.  
XX PF 06-APR-2001; 2001WO-IB000713.  
XX PR 07-APR-2000; 2000DE-01019173.  
XX PA (EPIG-) EPIGENOMICS AG.  
XX PI Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
XX designed to detect single-nucleotide polymorphisms and cytosine  
XX methylation status.  
XX Claim 1; SEQ ID NO 342529; 29pp + Sequence Listing; German.  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
XX and cytosine methylation status in chemically pretreated genomic DNA. The  
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
XX range of diseases including immune system, gastrointestinal, respiratory,  
XX central nervous system, cardiovascular and metabolic disorders. The  
XX oligomers are also used for detecting cell type differentiation. ABC00010  
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
XX represent the oligomers described in the invention. NOTE: The sequence  
XX data for this patent did not form part of the printed specification, but  
XX was obtained in electronic format from WIPO at  
XX ftp.wipo.int/pub/published\_pct\_sequences

SQ Sequence 12 BP; 5 A; 4 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 0.6%; Score 12; DB 1; Length 12;  
Best Local Similarity 100.0%; Pred. No. 2.2e+02;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 995 TTGTGTGGGAAT 1006  
DB 12 TTGTGTGGGAAT 1  
|||||

RESULT 732  
ABH74917  
ID ABH74917 standard; DNA; 12 BP.  
XX AC ABH74917;  
XX DT 22-FEB-2002 (first entry)  
XX DE Oligonucleotide primer SEQ ID NO 274904 for detecting SNP TSC0003723.  
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX OS Homo sapiens.  
XX PN WO200177384-A2.  
XX PD 18-OCT-2001.  
XX PF 06-APR-2001; 2001WO-IB000713.  
XX PR 07-APR-2000; 2000DE-01019173.  
XX PA (EPIG-) EPIGENOMICS AG.  
XX PI Olek A, Piepenbrock C, Berlin K;  
XX WPI; 2001-657177/75.  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
XX designed to detect single-nucleotide polymorphisms and cytosine  
XX methylation status.  
XX Claim 1; SEQ ID NO 274904; 29pp + Sequence Listing; German.  
XX This invention describes novel oligonucleotide primers or peptide nucleic  
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
XX and cytosine methylation status in chemically pretreated genomic DNA. The  
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
XX range of diseases including immune system, gastrointestinal, respiratory,  
XX central nervous system, cardiovascular and metabolic disorders. The  
XX oligomers are also used for detecting cell type differentiation. ABC00010  
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
XX represent the oligomers described in the invention. NOTE: The sequence  
XX data for this patent did not form part of the printed specification, but  
XX was obtained in electronic format from WIPO at  
XX ftp.wipo.int/pub/published\_pct\_sequences

SQ Sequence 12 BP; 5 A; 0 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.6%; Score 12; DB 1; Length 12;  
Best Local Similarity 100.0%; Pred. No. 2.2e+02;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 848 AGATTGAGAAATG 859  
DB 1 AGATTGAGAAATG 12  
|||||

RESULT 733  
ABH81939



```

ID ABH1939 standard; DNA; 12 BP.
XX
AC ABH1939;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide primer SEQ ID NO 281932 for detecting SNP TSC0010165.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
PI WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 281932; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 12 BP; 1 A; 0 C; 5 G; 6 T; 0 U; 0 Other;
XX
Query Match 0.6%; Score 12; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 2.2e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 992 TTGTTTGTGGGA 1003
Db 1 TTGTTTGTGGGA 12
|||||
RESULT 734
ABH18173/c
ID ABH18173 standard; DNA; 13 BP.
XX
AC ABH18173;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 218150 for detecting SNP TSC0053036.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
PI WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 281932; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 12 BP; 1 A; 0 C; 5 G; 6 T; 0 U; 0 Other;
XX
Query Match 0.6%; Score 12; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 2.2e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 992 TTGTTTGTGGGA 1003
Db 1 TTGTTTGTGGGA 12
|||||
RESULT 734
ABH18173/c
ID ABH18173 standard; DNA; 13 BP.
XX
AC ABH18173;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 218150 for detecting SNP TSC0053036.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
PI WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 218150; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 6 A; 3 C; 0 G; 4 T; 0 U; 0 Other;
XX
Query Match 0.6%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 850 ATTGAGAAATGTT 861
Db 13 ATTGAGAAATGTT 2
|||||
RESULT 735
ABH27531
ID ABH27531 standard; DNA; 13 BP.
XX
AC ABH27531;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 227508 for detecting SNP TSC0055485.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
PI WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 218150; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 6 A; 3 C; 0 G; 4 T; 0 U; 0 Other;
XX
Query Match 0.6%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 850 ATTGAGAAATGTT 861
Db 13 ATTGAGAAATGTT 2
|||||
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XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
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XX
PI Olek A, Piepenbrock C, Berlin K;
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PI WPI; 2001-657177/75.
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PT designed to detect single-nucleotide polymorphisms and cytosine
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XX
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CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 6 A; 3 C; 0 G; 4 T; 0 U; 0 Other;
XX
Query Match 0.6%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 850 ATTGAGAAATGTT 861
Db 13 ATTGAGAAATGTT 2
|||||
RESULT 735
ABH27531
ID ABH27531 standard; DNA; 13 BP.
XX
AC ABH27531;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 227508 for detecting SNP TSC0055485.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
PI WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 218150; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 6 A; 3 C; 0 G; 4 T; 0 U; 0 Other;
XX
Query Match 0.6%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 850 ATTGAGAAATGTT 861
Db 13 ATTGAGAAATGTT 2
|||||
```

DR WPI; 2001-657177/75.  
XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX Claim 1; SEQ ID NO 227508; 29pp + Sequence Listing; German.  
XX  
CC This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 3 A; 8 C; 0 G; 1 T; 0 U; 1 Other;  
  
Query Match 0.6%; Score 12; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 2.9e+02;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 1252 CCCATCCCCAAC 1263  
DB 2 CCCATCCCCAAC 13  
  
RESULT 736  
ABC68494  
ID ABC68494 standard; DNA; 13 BP.  
XX  
AC ABC68494;  
XX  
DT 21-FEB-2002 (first entry)  
XX  
DE Oligonucleotide SEQ ID NO 68511 for detecting SNP TSC0017863.  
XX  
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
OS Homo sapiens.  
XX  
FN WO200177384-A2.  
XX  
PD 18-OCT-2001.  
XX  
PF 06-APR-2001; 2001WO-IB000713.  
XX  
PR 07-APR-2000; 2000DE-01019173.  
XX  
PA (EPIG-) EPIGENOMICS AG.  
XX  
PI Olek A, Piepenbrock C, Berlin K;  
XX  
XX WPI; 2001-657177/75.  
XX  
PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
PS Claim 1; SEQ ID NO 68511; 29pp + Sequence Listing; German.  
XX  
CC This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,

CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 6 A; 0 C; 6 G; 1 T; 0 U; 0 Other;  
  
Query Match 0.6%; Score 12; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 2.9e+02;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 1015 GAAAAAGAGGGG 1026  
DB 1 GAAAAAGAGGGG 12  
  
RESULT 737  
ABC68841  
ID ABC68841 standard; DNA; 13 BP.  
XX  
AC ABC68841;  
XX  
DT 21-FEB-2002 (first entry)  
XX  
DE Oligonucleotide SEQ ID NO 68858 for detecting SNP TSC0017931.  
XX  
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
OS Homo sapiens.  
XX  
FN WO200177384-A2.  
XX  
PD 18-OCT-2001.  
XX  
PF 06-APR-2001; 2001WO-IB000713.  
XX  
PR 07-APR-2000; 2000DE-01019173.  
XX  
PA (EPIG-) EPIGENOMICS AG.  
XX  
PI Olek A, Piepenbrock C, Berlin K;  
XX  
XX WPI; 2001-657177/75.  
XX  
PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
PS Claim 1; SEQ ID NO 68858; 29pp + Sequence Listing; German.  
XX  
CC This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 13 BP; 3 A; 7 C; 0 G; 2 T; 0 U; 1 Other;  
  
Query Match 0.6%; Score 12; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 2.9e+02;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 1145 CCACCTATACCC 1156
Db |||||
2 CCACCTATACCC 13

RESULT 738
ABC47420/c
ID ABC47420 standard; DNA; 13 BP.
XX AC
XX ABC47420;
XX 21-FEB-2002 (first entry)
XX DE
XX Oligonucleotide SEQ ID NO 47437 for detecting SNP TSC0013618.
XX KW
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS
XX Homo sapiens.
XX PN
XX WO200177384-A2.
XX PD
XX 18-OCT-2001.
XX DT
XX 21-FEB-2002 (first entry)
XX XX
XX Oligonucleotide SEQ ID NO 47437 for detecting SNP TSC0013618.
XX KW
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS
XX Homo sapiens.
XX PN
XX WO200177384-A2.
XX PD
XX 18-OCT-2001.
XX PF
XX 06-APR-2001; 2001WO-IB000713.
XX PR
XX 07-APR-2000; 2000DE-01019173.
XX PA
XX (EPiG-) EPIGENOMICS AG.
XX PI
XX Olek A, Piepenbrock C, Berlin K;
XX WIPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 47437; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABR00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX SQ
XX Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 U; 0 Other;
XX Query Match 0.6%; Score 12; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 2.9e+02;
XX Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1038 AACTACTACTAA 1049
Db |||||
13 AACTACTACTAA 2

RESULT 739
ABC68495/c
ID ABC68495 standard; DNA; 13 BP.
XX AC
XX ABC68495;
XX 21-FEB-2002 (first entry)
XX DT

Oligonucleotide SEQ ID NO 218149 for detecting SNP TSC0053036.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.

Oligonucleotide SEQ ID NO 68512; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligomers are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABR00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 1 A; 6 C; 0 G; 6 T; 0 U; 0 Other;
Query Match 0.6%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1015 GAAAAAGAGGGG 1026
Db |||||
13 GAAAAAGAGGGG 2

RESULT 740
ABH18172
ID ABH18172 standard; DNA; 13 BP.
XX AC
XX ABH18172;
XX 22-FEB-2002 (first entry)
XX DT
XX Oligonucleotide SEQ ID NO 218149 for detecting SNP TSC0053036.
XX KW
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS
XX Homo sapiens.
XX PN
XX WO200177384-A2.
XX PD
XX 18-OCT-2001.
XX FX
XX

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PF 06-APR-2001; 2001WO-IB000713.
XX
XX
PR 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 218149; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
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XX
XX Sequence 13 BP; 4 A; 0 C; 3 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 12; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 2.9e+02;
XX Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 850 ATTGAGAATGTT 861
Db 1 ATTGAGAATGTT 12
XX
XX RESULT 741
XX ABF84872/C
XX ID ABF84872 standard; DNA; 13 BP.
XX
XX AC ABF84872;
XX
XX DT 22-FEB-2002 (first entry)
XX
XX DE Oligonucleotide SEQ ID NO 184869 for detecting SNP TSC0045599.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX OS Homo sapiens.
XX
XX PN WO200177384-A2.
XX
XX PD 18-OCT-2001.
XX
XX PF 06-APR-2001; 2001WO-IB000713.
XX
XX PR 07-APR-2000; 2000DE-01019173.
XX
XX PA (EPIG-) EPIGENOMICS AG.
XX
XX PI Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 162515; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
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XX data for this patent did not form part of the printed specification, but
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XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 1 A; 0 C; 8 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 12; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 2.9e+02;
XX Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 1251 CCCCATCCCCAA 1262
Db 13 CCCCATCCCCAA 2
XX
XX RESULT 742
XX ABF62518/C
XX ID ABF62518 standard; DNA; 13 BP.
XX
XX AC ABF62518;
XX
XX DT 22-FEB-2002 (first entry)
XX
XX DE Oligonucleotide SEQ ID NO 162515 for detecting SNP TSC0040885.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX OS Homo sapiens.
XX
XX PN WO200177384-A2.
XX
XX PD 18-OCT-2001.
XX
XX PF 06-APR-2001; 2001WO-IB000713.
XX
XX PR 07-APR-2000; 2000DE-01019173.
XX
XX PA (EPIG-) EPIGENOMICS AG.
XX
XX PI Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
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XX methylation status.
XX
XX Claim 1; SEQ ID NO 162515; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
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XX central nervous system, cardiovascular and metabolic disorders. The
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XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
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CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 U; 0 Other;

Query Match      0.6%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1038 AACTACTACTAA 1049
Db 12 AACTACTACTAA 1

RESULT 743
ABC96029/c
ID ABC96029 standard; DNA; 13 BP.
XX
AC ABC96029;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 96046 for detecting SNP TSC0023883.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
PS Claim 1; SEQ ID NO 96046; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 0 A; 7 C; 0 G; 6 T; 0 U; 0 Other;

Query Match      0.6%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1016 AAAAAGAGGGGG 1027
Db 13 AAAAAGAGGGGG 2

RESULT 744
ABC10320
ID ABC10320 standard; DNA; 13 BP.
XX
AC ABC10320;
XX
DT 20-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 10311 for detecting SNP TSC0002623.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
PS Claim 1; SEQ ID NO 10311; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 4 A; 0 C; 3 G; 6 T; 0 U; 0 Other;

Query Match      0.6%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 851 TTGAGATGTTA 862
Db 2 TTGAGATGTTA 13

RESULT 745
ABF57777/c
ID ABF57777 standard; DNA; 13 BP.
XX
AC ABF57777;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 157774 for detecting SNP TSC0039739.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;

```



CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 13 BP; 3 A; 7 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 0.6%; Score 12; DB 1; Length 13;  
 Best Local Similarity 100.0%; Pred. No. 2.9e+02;  
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1143 CTCACCTATAC 1154  
 Db 2 CTCACCTATAC 13  
 |||||

RESULT 748  
 ABF72635/c  
 ID ABF72635 standard; DNA; 13 BP.  
 XX  
 AC ABF72635;  
 XX  
 DT 22-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 172632 for detecting SNP TSC0007776.  
 XX  
 DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX

OS Homo sapiens.  
 XX  
 XX WO200177384-A2.  
 XX  
 PD 18-OCT-2001.

PF 06-APR-2001; 2001WO-IB000713.  
 XX  
 PR 07-APR-2000; 2000DE-01019173.  
 XX  
 PA (EPIG-) EPIGENOMICS AG.  
 XX  
 PI Olek A, Piepenbrock C, Berlin K;  
 XX  
 DR WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.

XX Claim 1; SEQ ID NO 172632; 29pp + Sequence Listing; German.  
 XX  
 CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX

SQ Sequence 13 BP; 3 A; 4 C; 1 G; 5 T; 0 U; 0 Other;

Query Match 0.6%; Score 12; DB 1; Length 13;  
 Best Local Similarity 100.0%; Pred. No. 2.9e+02;  
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 781 GAAAACGAGTGT 792  
 Db 12 GAAAACGAGTGT 1  
 |||||

RESULT 749  
 ABH27530/c  
 ID ABH27530 standard; DNA; 13 BP.  
 XX  
 AC ABH27530;  
 XX  
 DT 22-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 227507 for detecting SNP TSC0055485.  
 XX  
 DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX

OS Homo sapiens.  
 XX  
 XX WO200177384-A2.  
 XX  
 PD 18-OCT-2001.

PF 06-APR-2001; 2001WO-IB000713.  
 XX  
 PR 07-APR-2000; 2000DE-01019173.  
 XX  
 PA (EPIG-) EPIGENOMICS AG.  
 XX  
 PI Olek A, Piepenbrock C, Berlin K;  
 XX  
 DR WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is  
 PT designed to detect single-nucleotide polymorphisms and cytosine  
 PT methylation status.

XX Claim 1; SEQ ID NO 227507; 29pp + Sequence Listing; German.  
 XX  
 CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX

SQ Sequence 13 BP; 1 A; 0 C; 8 G; 3 T; 0 U; 1 Other;

Query Match 0.6%; Score 12; DB 1; Length 13;  
 Best Local Similarity 100.0%; Pred. No. 2.9e+02;  
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1252 CCCATCCCCAAC 1263  
 Db 12 CCCATCCCCAAC 1  
 |||||

RESULT 750  
 ABC68840/c  
 ID ABC68840 standard; DNA; 13 BP.  
 XX

```

AC ABC68840;
XX
XX
DT 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 68857 for detecting SNP TSC0017931.
DE
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 68857; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Claim 1; SEQ ID NO 68857; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 2 A; 0 C; 7 G; 3 T; 0 U; 1 Other;
XX
XX Query Match 0.6%; Score 12; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 2.9e+02;
XX Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1145 CCACCTATACCC 1156
XX Db 12 CCACCTATACCC 1
XX
XX RESULT 751
XX ABC96028
XX ID ABC96028 standard; DNA; 13 BP.
XX
XX AC ABC96028;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 96045 for detecting SNP TSC0023883.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 96045; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 6 A; 0 C; 7 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 12; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 2.9e+02;
XX Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1016 AAAAAGAGGGGG 1027
XX Db 1 AAAAAGAGGGGG 12
XX
XX RESULT 752
XX ABF62519
XX ID ABF62519 standard; DNA; 13 BP.
XX
XX AC ABF62519;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 162516 for detecting SNP TSC0040885.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX

```



PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
PT designed to detect single-nucleotide polymorphisms and cytosine  
PT methylation status.  
XX  
XX  
XX Claim 1; SEQ ID NO 162516; 29pp + Sequence Listing; German.  
PS  
CC This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
XX SQ Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 U; 0 Other;  
Query Match 0.6%; Score 12; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 2.9e+02;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1038 AACTACTACTAA 1049  
DB 2 AACTACTACTAA 13  
RESULT 753  
ABC69671  
ID ABC69671 standard; DNA; 13 BP.  
XX  
XX AC ABC69671;  
XX  
XX DT 21-FEB-2002 (first entry)  
XX  
XX DE Oligonucleotide SEQ ID NO 69688 for detecting SNP TSC0018133.  
XX  
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
XX OS Homo sapiens.  
XX  
XX PN WO200177384-A2.  
XX  
XX PD 18-OCT-2001.  
XX  
XX PF 06-APR-2001; 2001WO-IB000713.  
XX  
XX PR 07-APR-2000; 2000DE-01019173.  
XX  
XX PA (EPIG-) EPIGENOMICS AG.  
XX  
XX PI Olek A, Piepenbrock C, Berlin K;  
XX  
XX DR WPI; 2001-657177/75.  
XX  
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
XX designed to detect single-nucleotide polymorphisms and cytosine  
XX methylation status.  
XX  
XX PS Claim 1; SEQ ID NO 69688; 29pp + Sequence Listing; German.  
XX  
CC This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
XX SQ Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 U; 0 Other;  
Query Match 0.6%; Score 12; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 2.9e+02;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1038 AACTACTACTAA 1049  
DB 2 AACTACTACTAA 13  
RESULT 754  
ABC47421  
ID ABC47421 standard; DNA; 13 BP.  
XX  
XX AC ABC47421;  
XX  
XX DT 21-FEB-2002 (first entry)  
XX  
XX DE Oligonucleotide SEQ ID NO 47438 for detecting SNP TSC0013618.  
XX  
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.  
XX  
XX OS Homo sapiens.  
XX  
XX PN WO200177384-A2.  
XX  
XX PD 18-OCT-2001.  
XX  
XX PF 06-APR-2001; 2001WO-IB000713.  
XX  
XX PR 07-APR-2000; 2000DE-01019173.  
XX  
XX PA (EPIG-) EPIGENOMICS AG.  
XX  
XX PI Olek A, Piepenbrock C, Berlin K;  
XX  
XX DR WPI; 2001-657177/75.  
XX  
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
XX designed to detect single-nucleotide polymorphisms and cytosine  
XX methylation status.  
XX  
XX PS Claim 1; SEQ ID NO 47438; 29pp + Sequence Listing; German.  
XX  
CC This invention describes novel oligonucleotide primers or peptide nucleic  
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
CC and cytosine methylation status in chemically pretreated genomic DNA. The  
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
CC range of diseases including immune system, gastrointestinal, respiratory,  
CC central nervous system, cardiovascular and metabolic disorders. The  
CC oligomers are also used for detecting cell type differentiation. ABC00010  
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
CC represent the oligomers described in the invention. NOTE: The sequence  
CC data for this patent did not form part of the printed specification, but  
CC was obtained in electronic format from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
XX SQ Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 U; 0 Other;  
Query Match 0.6%; Score 12; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 2.9e+02;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1251 CCCCATCCCCAA 1262  
DB 2 CCCCATCCCCAA 13

```

Db      1  AACTACTACTAA 12
|||||
RESULT 755
ABF21988/c
ID  ABF21988 standard; DNA; 13 BP.
XX
AC  ABF21988;
XX
DT  21-FEB-2002 (first entry)
XX
DE  Oligonucleotide SEQ ID NO 121985 for detecting SNP TSC0030495.
XX
KW  SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW  peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW  central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS  Homo sapiens.
XX
PN  WO200177384-A2.
XX
PD  18-OCT-2001.
XX
PF  06-APR-2001; 2001WO-IB000713.
XX
PR  07-APR-2000; 2000DE-01019173.
XX
PA  (EPIG-) EPIGENOMICS AG.
XX
PI  Olek A, Piepenbrock C, Berlin K;
XX
DR  WPI; 2001-657177/75.
XX
PT  Set of oligonucleotides, useful for diagnosis and cell typing, is
PT  designed to detect single-nucleotide polymorphisms and cytosine
PT  methylation status.
XX
PS  Claim 1; SEQ ID NO 121985; 29pp + Sequence Listing; German.
XX
CC  This invention describes novel oligonucleotide primers or peptide nucleic
CC  acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC  and cytosine methylation status in chemically pretreated genomic DNA. The
CC  oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC  range of diseases including immune system, gastrointestinal, respiratory,
CC  central nervous system, cardiovascular and metabolic disorders. The
CC  oligomers are also used for detecting cell type differentiation. ABC00010
CC  -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC  represent the oligomers described in the invention. NOTE: The sequence
CC  data for this patent did not form part of the printed specification, but
CC  was obtained in electronic format from WIPO at
CC  ftp.wipo.int/pub/published_pct_sequences
XX
SQ  Sequence 13 BP; 3 A; 0 C; 7 G; 3 T; 0 U; 0 Other;
XX
Query Match 0.6%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY  1143 CTCACCTATAC 1154
|||||
Db      12 CTCACCTATAC 1
|||||
RESULT 756
ABF72634
ID  ABF72634 standard; DNA; 13 BP.
XX
AC  ABF72634;
XX
DT  22-FEB-2002 (first entry)
XX
DE  Oligonucleotide SEQ ID NO 172631 for detecting SNP TSC0007776.
XX
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 121985; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligomers are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 3 A; 0 C; 7 G; 3 T; 0 U; 0 Other;
Query Match 0.6%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY  1143 CTCACCTATAC 1154
|||||
Db      12 CTCACCTATAC 1
|||||
RESULT 757
ABF84873
ID  ABF84873 standard; DNA; 13 BP.
XX
AC  ABF84873;
XX
DT  22-FEB-2002 (first entry)
XX
DE  Oligonucleotide SEQ ID NO 184870 for detecting SNP TSC0045599.
XX
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 172631; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligomers are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 5 A; 1 C; 4 G; 3 T; 0 U; 0 Other;
Query Match 0.6%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY  781 GAAACCGAGTGT 792
|||||
Db      2 GAAACCGAGTGT 13
|||||
RESULT 757
ABF84873
ID  ABF84873 standard; DNA; 13 BP.
XX
AC  ABF84873;
XX
DT  22-FEB-2002 (first entry)
XX
DE  Oligonucleotide SEQ ID NO 184870 for detecting SNP TSC0045599.
XX
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 172631; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligomers are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 5 A; 1 C; 4 G; 3 T; 0 U; 0 Other;
Query Match 0.6%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY  781 GAAACCGAGTGT 792
|||||
Db      2 GAAACCGAGTGT 13
|||||

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PR 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
PA Olek A, Piepenbrock C, Berlin K;
PI WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 184870; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 4 A; 8 C; 0 G; 1 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1251 CCCATCCCCAA 1262
DB 1 CCCATCCCCAA 12
RESULT 758
ABF80384/C
XX ID ABF80384 standard; DNA; 13 BP.
XX AC ABF80384;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 180381 for detecting SNP TSC0006700.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 180381; 29pp + Sequence Listing; German.
XX
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```
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 1 A; 0 C; 9 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1257 CCCCAACCCCT 1268
DB 13 CCCCAACCCCT 2
RESULT 759
ABF80385
XX ID ABF80385 standard; DNA; 13 BP.
XX AC ABF80385;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 180382 for detecting SNP TSC0006700.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 180382; 29pp + Sequence Listing; German.
XX
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```
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 1 A; 0 C; 9 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1257 CCCCAACCCCT 1268
DB 13 CCCCAACCCCT 2
RESULT 759
ABF80385
XX ID ABF80385 standard; DNA; 13 BP.
XX AC ABF80385;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 180382 for detecting SNP TSC0006700.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 180382; 29pp + Sequence Listing; German.
XX
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XX SQ Sequence 13 BP; 3 A; 9 C; 0 G; 1 T; 0 U; 0 Other;
Query Match 0.6%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1257 CCCCAAGCCCT 1268
Db 1 CCCCAAGCCCT 12

RESULT 760
ABC10321/c
ID ABC10321 standard; DNA; 13 BP.
XX AC ABC10321;
XX DT 20-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 10312 for detecting SNP TSC0002623.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 10312; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 13 BP; 6 A; 3 C; 0 G; 4 T; 0 U; 0 Other;
Query Match 0.6%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 851 TTGAGATGTTA 862
Db 12 TTGAGATGTTA 1

RESULT 761

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ABF57776
ID ABF57776 standard; DNA; 13 BP.
XX AC ABF57776;
XX DT 21-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 157773 for detecting SNP TSC0039739.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 157773; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 13 BP; 1 A; 0 C; 6 G; 6 T; 0 U; 0 Other;
Query Match 0.6%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 992 TTGTTTGTGGA 1003
Db 1 TTGTTTGTGGA 12

RESULT 762
ACD66199/c
ID ACD66199 standard; RNA; 13 BP.
XX AC ACD66199;
XX DT 23-SEP-2003 (first entry)
XX DE Anti-HCV nucleic acid molecule target sequence #152.
XX KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
XX KW RNA stability; RNA expression; RNA synthesis; antisense;
XX KW enzymatic nucleic acid; hammerhead ribozyme; DNzyme; inozyme; zinzyme;
XX KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;

```

KW HBV reverse transcriptase; Enhancer I region; anti-HCV;  
 KW viral replication; degenerative; disease state; HBV infection;  
 KW HCV infection; cirrhosis; liver failure; hepatocellular carcinoma;  
 KW hepatotropic; cytostatic; virucide; antiinflammatory; target; ss.  
 XX  
 OS Hepatitis C virus.  
 XX  
 XX WO200281494-A1.  
 XX  
 XX PD 17-OCT-2002.  
 XX  
 XX PF 26-MAR-2002; 2002WO-US009187.  
 XX  
 XX PR 26-MAR-2001; 2001US-00817879.  
 XX  
 XX PR 08-JUN-2001; 2001US-00877478.  
 XX  
 XX PR 08-JUN-2001; 2001US-0296876P.  
 XX  
 XX PR 24-OCT-2001; 2001US-0335059P.  
 XX  
 XX PR 05-DEC-2001; 2001US-0337055P.  
 XX  
 XX (RIBO-) RIBOZYME PHARM INC.  
 XX  
 XX PA (BLAT/) BLATT L.  
 XX  
 XX PA (MACE/) MACEJAK D.  
 XX  
 XX PA (MCSW/) MCSWIGGEN J.  
 XX  
 XX PA (MORR/) MORRISSEY D.  
 XX  
 XX PA (PAVC/) PAVCO P.  
 XX  
 XX PA (LEEP/) LEE P.  
 XX  
 XX PA (DRAP/) DRAPER K.  
 XX  
 XX PA (ROBE/) ROBERTS E.  
 XX  
 XX PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;  
 XX PI Draper K, Roberts E;  
 XX  
 XX WPI; 2003-229207/22.  
 XX  
 XX DR Novel compound useful for treating cirrhosis, liver failure,  
 XX PT hepatocellular carcinoma, or condition associated with hepatitis C virus  
 XX PT infection.  
 XX  
 XX PS Claim 1; Page 320; 387pp; English.  
 XX  
 XX CC The present invention relates to nucleic acid molecules which modulate  
 CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or  
 CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense  
 CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,  
 CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed  
 CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse  
 CC transcriptase and/or HBV reverse transcriptase primer sequences, as well  
 CC as oligonucleotides that specifically bind the Enhancer I region of HBV  
 CC DNA. The nucleic acids may be used to modulate the expression of HBV  
 CC genes and HBV viral replication. Also disclosed is a method for screening  
 CC compounds and/or potential therapies directed against HBV, and compounds  
 CC that modulate the expression and/or replication of HCV. The compounds and  
 CC methods of the invention are useful for the treatment of degenerative and  
 CC disease states related to HBV and HCV infection, replication and gene  
 CC expression such as cirrhosis, liver failure, and hepatocellular  
 CC carcinoma. The present sequence represents a target for one of the anti-  
 CC HCV nucleic acid molecules disclosed in the present invention  
 XX  
 XX SQ Sequence 13 BP; 2 A; 2 C; 6 G; 0 T; 3 U; 0 Other;  
 Query Match 0.6%; Score 12; DB 1; Length 13;  
 Best Local Similarity 100.0%; Pred. No. 2.9e+02;  
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1202 CACCCTATCAGG 1213  
 Db 13 CACCCTATCAGG 2  
 RESULT 763  
 ABH43125/C  
 ID ABH43125 standard; DNA; 13 BP.  
 XX

AC ABH43125;  
 XX  
 XX DT 22-FEB-2002 (first entry)  
 XX  
 XX DE Oligonucleotide SEQ ID NO 243102 for detecting SNP TSC0059302.  
 XX  
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX  
 XX OS Homo sapiens.  
 XX  
 XX PN WO200177384-A2.  
 XX  
 XX PD 18-OCT-2001.  
 XX  
 XX PF 06-APR-2001; 2001WO-IB000713.  
 XX  
 XX PR 07-APR-2000; 2000DE-01019173.  
 XX  
 XX (EPIG-) EPIGENOMICS AG.  
 XX  
 XX PI Olek A, Piepenbrock C, Berlin K;  
 XX  
 XX DR WPI; 2001-657177/75.  
 XX  
 XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is  
 XX PT designed to detect single-nucleotide polymorphisms and cytosine  
 XX PT methylation status.  
 XX  
 XX PS Claim 1; SEQ ID NO 243102; 29pp + Sequence Listing; German.  
 XX  
 XX CC This invention describes novel oligonucleotide primers or peptide nucleic  
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)  
 CC and cytosine methylation status in chemically pretreated genomic DNA. The  
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a  
 CC range of diseases including immune system, gastrointestinal, respiratory,  
 CC central nervous system, cardiovascular and metabolic disorders. The  
 CC oligomers are also used for detecting cell type differentiation. ABC00010  
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073  
 CC represent the oligomers described in the invention. NOTE: The sequence  
 CC data for this patent did not form part of the printed specification, but  
 CC was obtained in electronic format from WIPO at  
 CC ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 XX SQ Sequence 13 BP; 5 A; 6 C; 0 G; 2 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 12; DB 1; Length 13;  
 Best Local Similarity 100.0%; Pred. No. 2.9e+02;  
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 308 TGTGTGGTGGAA 319  
 Db 12 TGTGTGGTGGAA 1  
 RESULT 764  
 ABH43124  
 ID ABH43124 standard; DNA; 13 BP.  
 XX  
 XX AC ABH43124;  
 XX  
 XX DT 22-FEB-2002 (first entry)  
 XX  
 XX DE Oligonucleotide SEQ ID NO 243101 for detecting SNP TSC0059302.  
 XX  
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;  
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;  
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.  
 XX  
 XX OS Homo sapiens.  
 XX  
 XX PN WO200177384-A2.

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XX 18-OCT-2001.
PD
XX
XX 06-APR-2001; 2001WO-IB000713.
FF
XX
XX 07-APR-2000; 2000DE-01019173.
PR
XX
XX (EP1G-) EPIGENOMICS AG.
PA
XX
XX Olek A, Piepenbrock C, Berlin K;
PI
XX WPI; 2001-657177/75.
DR
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 243101; 29pp + Sequence Listing; German.
PS
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC000010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABT00010-ABT82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 2 A; 0 C; 6 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 308 TGTGTGGTGGAA 319
DB 2 TGTGTGGTGGAA 13
RESULT 765
AAAX65125/c
ID AAAX65125 standard; RNA; 15 BP.
XX
XX AC AAAX65125;
XX
XX 20-JUL-1999 (first entry)
XX
XX Mouse B7-1 hammerhead ribozyme target SEQ ID NO:1757.
XX
XX Arthritic condition; graft tolerance; immune response; target; cleavage;
XX hammerhead ribozyme; hairpin ribozyme; human; rabbit; mouse; collagenase;
XX stromelysin; synovial membrane; joint; arthritis; osteoarthritis;
XX rheumatoid arthritis; autoimmune disease; allergy; inflammation;
XX diagnosis; ss.
XX
XX Mus sp.
XX
XX WO9618736-A2.
XX
XX 20-JUN-1996.
XX
XX 22-NOV-1995; 95WO-US015516.
XX
XX 13-DEC-1994; 94US-00354920.
XX
XX 23-DEC-1994; 94US-00363253.
XX
XX 23-DEC-1994; 94US-00363254.
XX
XX 17-FEB-1995; 95US-00390850.
XX
XX 20-APR-1995; 95US-00426124.
XX
XX 02-MAY-1995; 95US-00432874.
XX
XX 04-MAY-1995; 95US-00434509.
XX
XX 07-JUL-1995; 95US-0000951P.
XX
XX 07-JUL-1995; 95US-0000974P.
XX
XX 07-AUG-1995; 95US-00512861.
XX
XX 05-OCT-1995; 95US-00541365.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Beigelman L, Stinchcomb DT, Jarvis T, Draper K, Pavco P;
XX McSwiggen J, Gustofson J, Usman N, Wincott F, Matulic-Adamic J;
XX Karpeisky A, Thompson JD, Modak A, Burgin A;
XX
XX WPI; 1996-300653/30.
XX
XX Enzymatic nucleic acid molecules having a hammer-head motif - used for
PT the treatment of arthritis, induction of graft tolerance or treatment of
PT auto-immune diseases.
XX
XX Claim 10; Page 177; 307pp; English.
PS
XX
XX The present invention describes a novel enzymatic nucleic acid (ENA)
CC having a hammerhead motif (HM) comprising: (i) at least 5 ribose residues
CC; (ii) a 2'-C-allyl modification at position 4 of the ENA; (iii) at least
CC ten 2'-O-methyl modifications; and (iv) a 3'-end modification. The ENA's
CC can inhibit collagenase and stromelysin production in the synovial
CC membrane of joints for the treatment or prevention of arthritis,
CC particularly osteoarthritis or rheumatoid arthritis. The ENA's can also
CC be used to treat antigen presenting cells of a donor to induce tolerance
CC in a recipient to an alloantigen of a donor. They can also be used for
CC enhancing graft tolerance or for treating autoimmune disease, and for
CC treating allergies and other inflammatory conditions. The ENA's can also
CC be used in diagnosis. Ribozyme therapy impacts on the expression of
CC stromelysin without introducing the non-specific effects upon gene
CC expression which accompany treatment with retinoids and dexamethasone.
CC The concentration of ribozyme required to affect a therapeutic treatment
CC is lower than that required of antisense molecules, and is highly
CC specific. The present sequence is used in the exemplification of the
CC present invention
XX
XX Sequence 15 BP; 1 A; 2 C; 3 G; 0 T; 9 U; 0 Other;
SQ
Query Match 0.6%; Score 12; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 4.6e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1011 ACCTGAAAAGA 1022
DB 12 ACCTGAAAAGA 1
RESULT 766
AAAX75700
ID AAAX75700 standard; RNA; 15 BP.
XX
XX AC AAAX75700;
XX
XX 28-JUL-1999 (first entry)
XX
XX Human flt-1 and KDR hammerhead ribozyme target site #34.
XX
XX Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
XX KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
XX tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
XX fms-like tyrosine kinase 1; kinase insert domain containing receptor;
XX foetal liver kinase 1; ss.
XX
XX Homo sapiens.
XX
XX WO9715662-A2.
XX
XX 01-MAY-1997.
XX
XX 25-OCT-1996; 96WO-US017480.
XX

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XX PR 26-OCT-1995; 95US-0005974P.
XX PR 11-JAN-1996; 96US-00584040.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PA (CHIR ) CHIRON CORP.
XX
XX PI Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;
XX DR WPI; 1997-259017/23.
XX
XX PT Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
XX PT stability_ useful for treating e.g. tumour angiogenesis, psoriasis,
XX PT rheumatoid arthritis, etc., in a human patient.
XX
XX PS Example 9; Page 192; 218pp; English.
XX
XX CC The present invention describes nucleic acid molecules which modulate the
XX CC synthesis, expression and/or stability of a mRNA encoding 1 or more
XX CC receptors of vascular endothelial growth factor (VEGF). A patient
XX CC (preferably human) having a condition associated with the level of the
XX CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
XX CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
XX CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
XX CC treated by administering the nucleic acid molecule or the expression
XX CC vector to the patient. AAX67275 to AAX75752 represent specific examples
XX CC of nucleic acid molecules from the present invention
XX
XX SQ Sequence 15 BP; 2 A; 3 C; 4 G; 0 T; 6 U; 0 Other;
Query Match 0.6%; Score 12; DB 1; Length 15;
Best Local Similarity 50.0%; Pred. No. 4.6e+02;
Matches 6; Conservative 6; Mismatches 0; Indels 0; Gaps 0;
QY 915 TGGTCCTTTGGCT 926
Db 2 UGGUCUUGCCU 13
RESULT 767
AAZ65580
ID AAZ65580 standard; DNA; 15 BP.
AC AAZ65580;
XX
XX DT 30-MAR-2000 (first entry)
XX
XX DE Immunosuppressant inhibitor oligonucleotide VEGF-445.
XX
XX KW Immunosuppressant inhibitor; transforming growth factor beta; TGF beta;
XX KW vascular endothelial growth factor; VEGF; interleukin-10; IL-10; cancer;
XX KW prostaglandin E2; PGE2; immune response; tumour; asthma; Crohn's disease;
XX KW monocyte chemotactic protein-1; MCP-1; ulcerative colitis; diabetes;
XX KW glomerulonephritis; acute respiratory distress syndrome; ss;
XX KW atherosclerosis.
XX
XX OS Unidentified.
XX
XX PN WO9963975-A2.
XX
XX PD 16-DEC-1999.
XX
XX PF 10-JUN-1999; 99WO-EP004013.
XX
XX PR 10-JUN-1998; 98EP-00110709.
XX PR 25-JUL-1998; 98EP-00113974.
XX
XX PA (BIOG-) BIOGNOSTIK GES BIOMOLEKULARE DIAGNOSTIK.
XX
XX PI Schlingensiepen K, Schlingensiepen R, Brysch W;
XX DR WPI; 2000-097470/08.
XX
Composition containing immune stimulant and inhibitor of agent that
adversely affects the immune response, for treating cancers and
infections.
Claim 10; Fig 1; 30pp; English.
This sequence is an immunosuppressant inhibitor oligonucleotide, which is
used in the invention. The invention relates to a composition which
contains at least one inhibitor (less than 100 kD) of a substance (e.g.
transforming growth factor TGF-beta, vascular endothelial growth factor
VEGF, interleukin-10 IL-10, prostaglandin E2 PGE2, or their receptors)
that adversely affects the immune response. The composition also includes
at least one stimulant that positively affects the immune response. This
oligonucleotide is an example of an inhibitor that is used in the
composition. The composition is used as an immunostimulant for the
treatment of neoplasms and infections, particularly hyperproliferation;
leukaemia; (non-)Hodgkin's lymphoma; carcinoma (of oesophagus, bronchi,
colon-rectum, stomach, intestine, gall bladder or duct, pancreas, anus,
breast, ovary, cervix, endometrium, prostate or bladder), liver tumours,
malignant melanoma, brain tumours and sarcomas. The oligonucleotides
most of which are directed against TGFbeta or VEGF, are inhibitors of
monocyte chemotactic protein-1 (MCP-1) and are useful as anti-
inflammatory for treating e.g. asthma, Crohn's disease, ulcerative
colitis, diabetes, glomerulonephritis, acute respiratory distress
syndrome and the formation of atherosclerotic plaque
SQ Sequence 15 BP; 0 A; 4 C; 3 G; 8 T; 0 U; 0 Other;
Query Match 0.6%; Score 12; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 4.6e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 909 TTTCCTTGGTCT 920
Db 2 TTTCCTTGGTCT 13
RESULT 768
AAZ51932/c
ID AAZ51932 standard; DNA; 15 BP.
XX
XX AC AAZ51932;
XX
XX DT 31-OCT-2000 (first entry)
XX
XX DE Probe for P. aeruginosa muCA mutant (deletion 440).
XX
XX KW AlgU; sigma factor; SpOH; mucoidy; muCA; mucB; cystic fibrosis;
XX KW conversion; non-mucoid; probe; ss.
XX
XX OS Pseudomonas aeruginosa.
XX
XX PN US6083691-A.
XX
XX PD 04-JUL-2000.
XX
XX PF 24-NOV-1995; 95US-00505307.
XX
XX PR 12-FEB-1993; 93US-00017114.
XX
XX PA (TEXA ) UNIV TEXAS SYSTEM.
XX
XX PI Martin DW, Deretic V;
XX DR WPI; 2000-464334/40.
XX
XX PT Detecting conversion to mucoidy in Pseudomonas aeruginosa having an
XX PT inactive muCA gene product, useful for detecting cystic fibrosis in
XX PT patients with chronic respiratory infection by detecting an altered
XX PT sequence in the muCA gene.
XX
XX PS Claim 6; Col 47; 50pp; English.

```

CC The Pseudomonas aeruginosa *muca* and *mucB* genes, immediately downstream of  
 CC *algu*, play a role in the regulation of mucoidy. Specific sequence  
 CC alterations in the *muca* gene cause conversion from the non-mucoid to  
 CC mucoid state. These alterations include deletion of nucleotide G from  
 CC position 439 or 440, deletion of nucleotide A from position 371,  
 CC substitution of nucleotide C from position 362 to T, or an insertion of 8  
 CC nucleotides (AGGGGGC) between positions 433 and 434. These alterations  
 CC give rise to frameshift deletions and duplications or nonsense mutations.  
 CC Conversion to mucoidy in *P. aeruginosa* can therefore be detected by  
 CC determining the presence of an inactive *muca* gene product having an  
 CC altered *muca* gene. The method is useful for the early detection and  
 CC diagnosis of the conversion to mucoidy of *P. aeruginosa*. Specifically,  
 CC the method is useful for detecting the switch from non-mucoid to mucoid  
 CC state in *P. aeruginosa* infecting cystic fibrosis patients. The DNA  
 CC sequences are useful as probes or primers in nucleic acid hybridization,  
 CC e.g. Southern or Northern blotting. The DNA sequences are also useful in  
 CC analyzing the complex interaction of structural and regulatory genes in  
 CC diverse microorganisms and in clinical isolates from cystic fibrosis  
 CC patients

XX SQ Sequence 15 BP; 2 A; 4 C; 9 G; 0 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 12; DB 1; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 4.6e+02;  
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1050 GCCCTGGCCCC 1061  
 |||||

Db 15 GCCCTGGCCCC 4

RESULT 769

AAF48241

ID AAF48241 standard; DNA; 15 BP.

XX AC AAF48241;

XX DT 30-MAR-2001 (first entry)

XX DE IGFBP3 oligonucleotide #1661.

XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;  
 KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
 KW skin disorder; insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;  
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;  
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
 KW hyperneovascular condition; hyperplasia; kidney disease;  
 KW neovascular condition of the retina; ss.

XX OS Homo sapiens.

XX FN WO200078341-A1.

XX PD 28-DEC-2000.

XX PF 21-JUN-2000; 2000WO-AU000693.

XX PR 21-JUN-1999; 99US-0140345P.

XX PA (MURD-) MURDOCH CHILDRENS RES INST.

XX PI Wright CJ, Werther GA, Edmondson SR;

XX DR WPI; 2001-041421/05.

XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering  
 PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that  
 PT inhibits or reduces growth factor mediated cell proliferation and/or  
 PT inflammation.  
 XX Example 7; Page 55; 201pp; English.

CC The present invention relates to a method for ameliorating the effects of  
 CC skin disorders. The method comprises contacting the skin with an  
 CC antisense oligonucleotide, (for insulin-like Growth Factor [IGF]-1  
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of  
 CC inhibiting or reducing growth factor mediated cell proliferation,  
 CC inflammation and/or other disorders. The present sequence is an  
 CC oligonucleotide which can be used to design the antisense  
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-  
 CC F45161). The method is useful for ameliorating the effects of psoriasis,  
 CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,  
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a  
 CC hyperneovascular condition such as a neovascular condition of the retina,  
 CC brain or skin, growth factor-mediated malignancies, other sclerotic  
 CC disease, kidney disease, hyperproliferation of the inside of blood  
 CC vessels or any other hyperplasia

XX SQ Sequence 15 BP; 2 A; 7 C; 2 G; 4 T; 0 U; 0 Other;

Query Match 0.6%; Score 12; DB 1; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 4.6e+02;  
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 932 CCCCTCCTTCA 943  
 |||||

Db 1 CCCCTCCTTCA 12

RESULT 770

AAF48238

ID AAF48238 standard; DNA; 15 BP.

XX AC AAF48238;

XX DT 30-MAR-2001 (first entry)

XX DE IGFBP3 oligonucleotide #1658.

XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;  
 KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
 KW skin disorder; insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;  
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;  
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
 KW hyperneovascular condition; hyperplasia; kidney disease;  
 KW neovascular condition of the retina; ss.

XX OS Homo sapiens.

XX FN WO200078341-A1.

XX PD 28-DEC-2000.

XX PF 21-JUN-2000; 2000WO-AU000693.

XX PR 21-JUN-1999; 99US-0140345P.

XX PA (MURD-) MURDOCH CHILDRENS RES INST.

XX PI Wright CJ, Werther GA, Edmondson SR;

XX DR WPI; 2001-041421/05.

XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering  
 PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that  
 PT inhibits or reduces growth factor mediated cell proliferation and/or  
 PT inflammation.  
 XX Example 7; Page 55; 201pp; English.

XX The present invention relates to a method for ameliorating the effects of  
 CC skin disorders. The method comprises contacting the skin with an  
 CC antisense oligonucleotide, (for insulin-like Growth Factor [IGF]-1  
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of



CC inhibiting or reducing growth factor mediated cell proliferation,  
 CC inflammation and/or other disorders. The present sequence is an  
 CC oligonucleotide which can be used to design the antisense  
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-  
 CC F45161). The method is useful for ameliorating the effects of psoriasis,  
 CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,  
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a  
 CC hyperneovascular condition such as a neovascular condition of the retina,  
 CC disease, kidney disease, hyperproliferation of the inside of blood  
 CC vessels or any other hyperplasia

SQ Sequence 15 BP; 1 A; 7 C; 3 G; 4 T; 0 U; 0 Other;  
 Query Match 0.6%; Score 12; DB 1; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 4.6e+02;  
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 932 CCCTCCTCTTCA 943  
 |||||  
 Db 4 CCCTCCTCTTCA 15

RESULT 771  
 AAF48239  
 ID AAF48239 standard; DNA; 15 BP.  
 XX  
 AC AAF48239;

DT 30-MAR-2001 (first entry)

DE IGFBP3 oligonucleotide #1659.

XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;  
 KW cytosatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
 KW skin disorder; insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;  
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;  
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
 KW hyperneovascular condition; hyperplasia; kidney disease;  
 KW neovascular condition of the retina; ss.

OS Homo sapiens.

FN WO200078341-A1.

PD 28-DEC-2000.

PF 21-JUN-2000; 2000WO-AU000693.

PR 21-JUN-1999; 99US-0140345P.

PA (MURD-) MURDOCH CHILDRENS RES INST.

PI Wright CU, Werther GA, Edmondson SR;

DR WPI; 2001-041421/05.

PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering  
 UV (ultra-violet) treatment (optional) and an antisense nucleic acid that  
 PT inhibits or reduces growth factor mediated cell proliferation and/or  
 PT inflammation.

PS Example 7; Page 55; 201pp; English.

XX The present invention relates to a method for ameliorating the effects of  
 CC skin disorders. The method comprises contacting the skin with an  
 CC antisense oligonucleotide, (for insulin-like Growth Factor [IGF]-1  
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of  
 CC inhibiting or reducing growth factor mediated cell proliferation,  
 CC inflammation and/or other disorders. The present sequence is an  
 CC oligonucleotide which can be used to design the antisense  
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-

CC F45161). The method is useful for ameliorating the effects of psoriasis,  
 CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,  
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a  
 CC hyperneovascular condition such as a neovascular condition of the retina,  
 CC brain or skin, growth factor-mediated malignancies, other sclerotic  
 CC disease, kidney disease, hyperproliferation of the inside of blood  
 CC vessels or any other hyperplasia

SQ Sequence 15 BP; 1 A; 7 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.6%; Score 12; DB 1; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 4.6e+02;  
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 932 CCCTCCTCTTCA 943  
 |||||  
 Db 3 CCCTCCTCTTCA 14

RESULT 772  
 AAF48240  
 ID AAF48240 standard; DNA; 15 BP.  
 XX  
 AC AAF48240;

DT 30-MAR-2001 (first entry)

DE IGFBP3 oligonucleotide #1660.

XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;  
 KW cytosatic; dermatological; cardiant; virucide; ophthalmological; keloid;  
 KW skin disorder; insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;  
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;  
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
 KW hyperneovascular condition; hyperplasia; kidney disease;  
 KW neovascular condition of the retina; ss.

OS Homo sapiens.

FN WO200078341-A1.

PD 28-DEC-2000.

PF 21-JUN-2000; 2000WO-AU000693.

PR 21-JUN-1999; 99US-0140345P.

PA (MURD-) MURDOCH CHILDRENS RES INST.

PI Wright CU, Werther GA, Edmondson SR;

DR WPI; 2001-041421/05.

PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering  
 UV (ultra-violet) treatment (optional) and an antisense nucleic acid that  
 PT inhibits or reduces growth factor mediated cell proliferation and/or  
 PT inflammation.

PS Example 7; Page 55; 201pp; English.

XX The present invention relates to a method for ameliorating the effects of  
 CC skin disorders. The method comprises contacting the skin with an  
 CC antisense oligonucleotide, (for insulin-like Growth Factor [IGF]-1  
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of  
 CC inhibiting or reducing growth factor mediated cell proliferation,  
 CC inflammation and/or other disorders. The present sequence is an  
 CC oligonucleotide which can be used to design the antisense  
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-  
 CC F45161). The method is useful for ameliorating the effects of psoriasis,  
 CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,  
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a  
 CC hyperneovascular condition such as a neovascular condition of the retina,

CC brain or skin, growth factor-mediated malignancies, other sclerotic  
 CC disease, kidney disease, hyperproliferation of the inside of blood  
 CC vessels or any other hyperplasia

SQ Sequence 15 BP; 1 A; 7 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.6%; Score 12; DB 1; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 4.6e+02;  
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 932 CCTCTCTCTCA 943  
 |||||  
 Db 2 CCTCTCTCTCA 13

## RESULT 773

ABK46570  
 ID ABK46570 standard; DNA; 15 BP.

AC ABK46570;

XX 05-JUN-2002 (first entry)

DE EDG4 gene, allele specific oligonucleotide probe #1.

KW Endothelial differentiation lysophosphatidic acid GPCR 4; receptor;  
 KW G-protein coupled receptor; EDG4; cytosolic; gene therapy;  
 KW antisense gene therapy; polymorphism; haplotype; ovarian cancer;  
 KW allele specific oligonucleotide; ASO; probe; ss.

XX Homo sapiens.

OS

PN WO200212342-A2.

XX 14-FEB-2002.

XX 06-AUG-2001; 2001WO-US024649.

XX 04-AUG-2000; 2000US-0223177P.

XX (GENA-) GENAISSANCE PHARM INC.  
 Kazemi A, Koshy B, Sanchis A;

XX WPI; 2002-257470/30.

XX New endothelial differentiation, G-protein coupled receptor-4 gene (EDG4)  
 PT polymorphic variants, for studying the expression and function of EDG4  
 PT and screening drugs to treat ovarian cancer.

XX Claim 16; Page 13; 66pp; English.

CC The invention describes a polynucleotide (I) which is a polymorphic  
 CC variant of a reference sequence for the endothelial differentiation,  
 CC lysophosphatidic acid G-protein coupled receptor-4 (EDG4) gene, EDG4 cDNA  
 CC (located on chromosome 19p12). (I) is useful for studying the expression  
 CC and function of EDG4 and expressing EDG4 protein for use in screening for  
 CC candidate drugs to treat diseases related to EDG4 activity. The  
 CC polymorphism and haplotype data are useful for validating whether EDG4 is  
 CC a suitable target for drugs to treat ovarian cancer. Establishing the  
 CC EDG4 haplotype or haplotype pair of an individual is useful for improving  
 CC the efficiency and reliability of discovery and development of drugs for  
 CC treating diseases associated with EDG4 activity. The haplotyping method  
 CC is useful to validate EDG4 as a candidate target for treating a specific  
 CC condition or disease predicted to be associated with EDG4 activity and  
 CC for screening for compounds targeting EDG4. A polymorphic variant of EDG4  
 CC is useful in studying the effect of variation on the biological activity  
 CC of EDG4, on the binding affinity of candidate drugs targeting EDG4 for  
 CC the treatment of ovarian cancer. This sequence represents an allele  
 CC specific oligonucleotide (ASO) probe used in identify allele of the EDG4  
 CC gene

XX Sequence 15 BP; 2 A; 11 C; 0 G; 1 T; 0 U; 1 Other;

Query Match 0.6%; Score 12; DB 1; Length 15;  
 Best Local Similarity 85.7%; Pred. No. 4.6e+02;  
 Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1089 CTTACACCCACCC 1102  
 |||||  
 Db 1 CTTACACCCACCC 14

## RESULT 774

ABL88305/C  
 ID ABL88305 standard; DNA; 15 BP.

XX

AC ABL88305;

XX 20-MAY-2002 (first entry)

XX Human CHRNE allele-specific oligonucleotide (ASO) primer, SEQ ID NO:39.

DE Human; cholinergic receptor nicotinic epsilon polypeptide; CHRNE;  
 KW chromosome 17p13-12; acetylcholine receptor; AChR;  
 KW neuromuscular junction; skeletal muscle; postnatal development;  
 KW congenital myasthenic syndrome; CMS; haplotyping; genotyping; haplotype;  
 KW genetic variant; single nucleotide polymorphism; SNP; gene therapy;  
 KW drug screening; allele-specific oligonucleotide; ASO; primer; ss.

XX Homo sapiens.

XX WO200198316-A2.

XX 27-DEC-2001.

XX 20-JUN-2001; 2001WO-US019835.

XX 20-JUN-2000; 2000US-0212870P.

XX (GENA-) GENAISSANCE PHARM INC.

XX Amaro E, Bieganski KM, Kliem SE, Koshy B, Tanguay DA;  
 WPI; 2002-130787/17.

XX Novel genetic variants of cholinergic receptor, nicotinic, epsilon  
 PT polypeptide gene useful in studying expression and function of the  
 PT protein, and for screening drugs to treat diseases e.g. congenital  
 PT myasthenic syndrome.

XX Claim 17; Page 14; 104pp; English.

XX The invention relates to a method for haplotyping the cholinergic  
 CC receptor, nicotinic, epsilon polypeptide (CHRNE) gene (ABL88268) of an  
 CC individual, and also describes 17 novel polymorphic sites within the  
 CC human CHRNE gene. The CHRNE gene is located on chromosome 17p13-12 and  
 CC contains 12 exons which encode a 493 amino acid protein (AB049112). The  
 CC CHRNE protein is one of the 5 subunits of mammalian acetylcholine  
 CC receptors (AChRs) found at neuromuscular junctions in juveniles and  
 CC adults, and is essential for the normal postnatal development of skeletal  
 CC muscle. Mutations in the CHRNE gene are associated with congenital  
 CC myasthenic syndrome (CMS). CHRNE gene sequences can therefore be used in  
 CC gene therapy. The CHRNE gene is also useful for studying the expression  
 CC and function of CHRNE, and in expressing CHRNE protein for use in  
 CC screening for candidate drugs to treat diseases related to CHRNE. The  
 CC method of the invention is useful for haplotyping the CHRNE gene in an  
 CC individual, and can also be used in pharmaceutical research to validate  
 CC candidate drugs for, treating a specific condition or disease  
 CC predicted to be associated with CHRNE activity such as CMS. Polymorphisms  
 CC in the target region may be determined by the use of allele-specific  
 CC oligonucleotides (ASOs; ABL88370-ABL88320) as probes and primers, and by  
 CC primer extension using oligonucleotide primers comprising sequences  
 CC ABL88371-ABL88354. The CHRNE protein is useful for improving the  
 CC efficiency and reliability of several steps in the discovery and

CC development of drugs for treating diseases associated with CHRNE  
 CC activity, and may be used to screen drugs which target CHRNE. Sequences  
 CC AB188287-ABL88320 represent specifically claimed allele-specific  
 CC oligonucleotide (ASO) primers used for detecting polymorphisms in the  
 CC CHRNE gene

XX Sequence 15 BP; 2 A; 0 C; 9 G; 3 T; 0 U; 1 Other;

Query Match 0.6%; Score 12; DB 1; Length 15;  
 Best Local Similarity 85.7%; Pred. No. 4.6e-02;  
 Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1250 ACCCATCCCAAC 1263  
 :|||||  
 Db 14 MCCCTTCCCAAC 1

RESULT 775  
 ABK85664/C

ID ABK85664 standard; DNA; 15 BP.

XX AC ABK85664;

XX DT 15-AUG-2002 (first entry)

XX DE Human SCVB6 gene polymorphism detection ASO primer #3.

XX KW Human; small inducible cytokine subfamily B (Cys-X-Cys);  
 KW Member 6 (granulocyte chemotactic protein 2); SCVB6; primer; ss;  
 KW inflammatory disorder; cancer; antiinflammatory; cytostatic;  
 KW gene therapy; SCVB6 isogene expression modulator; ASO; SNP;  
 KW allele-specific oligonucleotide; single nucleotide polymorphism.

XX OS Homo sapiens.

XX XN W0200227030-A1.

XX PD 04-APR-2002.

XX PF 27-SEP-2001; 2001WO-US030413.

XX PR 27-SEP-2000; 2000US-0235809P.

XX PA (GENA-) GENAISSANCE PHARM INC.

XX PI Anastasio AE, Bentivegna SC, Choi JY, Monroe G, Russo DP;

XX DR WPI; 2002-405057/43.

XX CC New isolated polymorphic variant of small inducible cytokine subfamily B  
 PT (Cys-X-Cys), Member 6 (granulocyte chemotactic protein 2) gene, useful  
 PT for expressing protein isoform used in drug screening techniques.

XX PS Claim 14; Page 12; 71pp; English.

XX CC The present invention relates to a new polynucleotide having small  
 CC inducible cytokine subfamily B (Cys-X-Cys), Member 6 (granulocyte  
 CC chemotactic protein 2) (SCVB6) isogene. The invention is useful for  
 CC studying expression and function of SCVB6 and expressing SCVB6 protein  
 CC for use in screening for candidate drugs to treat diseases related to  
 CC SCVB6 activity. The polymorphism and haplotype data is useful for  
 CC validating whether SCVB6 is a suitable target for drugs to inflammatory  
 CC disorders and cancer, screening for such drugs and reducing bias in  
 CC clinical trials of such drugs. The invention is also useful for  
 CC therapeutic purposes. The method of the invention is useful for  
 CC identifying an association between susceptibility to a disease, staging  
 CC of a disease, or response to a drug. The present nucleic acid sequence  
 CC represents one of a collection of allele-specific oligonucleotide (ASO)  
 CC primers (ABK85662-ABK85679) that were used in the invention to detect  
 CC polymorphisms in the human SCVB6 gene

XX SQ Sequence 15 BP; 4 A; 5 C; 4 G; 1 T; 0 U; 1 Other;

Query Match

Best Local Similarity 0.6%; Score 12; DB 1; Length 15;

Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1099 ACCCTGGGCTTCAG 1112

Db 14 MCCCTGGGCTTCAG 1

RESULT 776

AAS96179

ID AAS96179 standard; DNA; 15 BP.

XX AC AAS96179;

XX DT 26-FEB-2002 (first entry)

XX DE Human Acetylcholinesterase gene allele specific primer #26.

XX KW Human; ss; PCR primer; allele specific oligonucleotide; ASO; ACHE;  
 KW acetylcholinesterase; polymorphic variant; haplotyping; genotyping;  
 KW neurological disease; Parkinson's disease; Alzheimer's disease; cancer;  
 KW leukaemia; tumour; chromosome 7q22.

XX OS Homo sapiens.

XX XN W0200179219-A2.

XX PD 25-OCT-2001.

XX PF 11-APR-2001; 2001WO-US011853.

XX PR 14-APR-2000; 2000US-0197173P.

XX XN (GENA-) GENAISSANCE PHARM INC.

XX PA (KAZE/) KAZEMI A.

XX PI Bentivegna SC, Chew A, Choi JY, Koshy B;

XX DR WPI; 2002-055248/07.

XX CC New polymorphic variants comprising acetylcholinesterase (ACHE) isogene,  
 PT useful in expressing ACHE protein for use in screening for candidate  
 PT drugs to treat diseases related to ACHE activity, e.g. neurological  
 PT diseases or cancer.

XX PS Claim 16; Page 13; 79pp; English.

XX CC The invention relates to a polynucleotide comprising a polymorphic  
 CC variant of an acetylcholinesterase (ACHE) gene or fragment, protein or  
 CC complement, the variant comprising an ACHE isogene defined by a haplotype  
 CC selected from haplotypes 1-20 listed in the specification. Also included  
 CC are methods for haplotyping and genotyping the ACHE gene of an  
 CC individual, a method for predicting a haplotype pair for the ACHE gene of  
 CC an individual, a method for identifying an association between a trait  
 CC and at least one haplotype or haplotype pair of ACHE gene, recombinant  
 CC nonhuman organisms transformed or transfected with the polynucleotide  
 CC sequence or encoded by the polymorphic variant sequence, an isolated  
 CC antibody specific for and immunoreactive with ACHE, a method of screening  
 CC for drugs targeting the polypeptide contacting ACHE polymorphic variant  
 CC with a candidate agent and assaying for binding activity, a computer  
 CC system for storing and analysing polymorphism data for ACHE gene and a  
 CC genome anthology for ACHE gene which comprises ACHE isogenes defined by  
 CC haplotypes 1-20 given in the specification. The polymorphisms are useful  
 CC for studying the biological function of ACHE as well as in identifying  
 CC drugs targeting this protein for the treatment of disorder related to its  
 CC abnormal expression or function. The polymorphic variants may also be  
 CC used in screening for compounds targeting ACHE to treat a specific  
 CC condition or disease predicted to be associated with ACHE activity e.g.  
 CC neurological diseases (e.g. Parkinson's disease and Alzheimer's disease),  
 CC cancer, leukaemia, and tumours. The ACHE gene maps to human chromosome  
 CC 7q22. The present sequence is an allele specific oligonucleotide (ASO)

CC PCR primer used to detect the polymorphic ACHE variants of the invention  
 XX  
 SQ Sequence 15 BP; 2 A; 10 C; 1 G; 1 T; 0 U; 1 Other;  
 Query Match 0.6%; Score 12; DB 1; Length 15;  
 Best Local Similarity 85.7%; Pred. No. 4.6e+02;  
 Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;  
 QY 1252 CCCATCCCAACCC 1265  
 |||||  
 |||||  
 DB 2 CCCATCCCAACCC 15  
 RESULT 777  
 AAS99989/c  
 ID AAS99989 standard; DNA; 15 BP.  
 XX  
 AC AAS99989;  
 XX  
 DT 12-MAR-2002 (first entry)  
 XX  
 DE Human NPR1 gene allele-specific oligonucleotide sequencing primer #10.  
 XX  
 KW Human; natriuretic peptide receptor A/guanylate cyclase A; NPR1; ss;  
 KW atrionatriuretic peptide receptor A; haplotyping; cytostatic; genotyping;  
 KW haplotype pair; single nucleotide polymorphism; gene therapy; PCR primer;  
 KW drug screening; hypertension; hypotensive; sequencing primer; probe.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200179231-A2.  
 XX  
 PD 25-OCT-2001.  
 XX  
 PF 16-APR-2001; 2001WO-US012300.  
 XX  
 PR 14-APR-2000; 2000US-0197330P.  
 XX  
 PA (GENA-) GENAISSANCE PHARM INC.  
 XX  
 PI Bentivegna SC, Choi JY, Kliem SE, Nandabalan K;  
 XX  
 DR WPI; 2002-066340/09.  
 XX  
 PT Genotyping human natriuretic peptide receptor A/guanylate cyclase gene of  
 PT an individual, involves determining identity of nucleotide pair at  
 PT specific polymorphic sites for two copies of the gene.  
 XX  
 PS Claim 15; Page 14; 96pp; English.  
 XX  
 CC The invention relates to single nucleotide polymorphisms in the gene  
 CC encoding the human natriuretic peptide receptor A/guanylate cyclase A  
 CC (atrionatriuretic peptide receptor A) or NPR1 polypeptide. A method for  
 CC haplotyping the NPR1 gene in an individual comprises identifying the  
 CC nucleotide at one or more polymorphic sites and determining whether one  
 CC of the copies of the gene is defined by one of the NPR1 haplotypes given  
 CC in the specification or whether both copies are defined by a haplotype  
 CC pair. This method is useful in genotyping, whereby all possible haplotype  
 CC pairs can be assigned to specific genotypes. An association between a  
 CC trait and a haplotype or haplotype pair of the NPR1 gene can be  
 CC identified by comparing the frequency of the haplotype pair of the NPR1 gene in  
 CC a population exhibiting the trait with the frequency of the haplotype pair  
 CC or haplotype pair in a reference population, where a higher haplotype  
 CC frequency in the trait population indicates the trait is associated with  
 CC the haplotype or haplotype pair. NPR1 and its corresponding DNA are used  
 CC for studying the expression and function of NPR1, for use in screening  
 CC for candidate drugs to treat diseases related to NPR1 activity, such as  
 CC hypertension. The sequences are also useful for studying the effect of  
 CC variation on the biological activity of NPR1 as well as on the binding  
 CC affinity of candidate drugs targeting NPR1. Sequences AAS99959-AAS99990  
 CC and ABX09390-ABX09462 represent probes, sequencing primers and PCR  
 CC primers used to detect NPR1 gene polymorphisms  
 XX

SQ Sequence 15 BP; 4 A; 6 C; 4 G; 0 T; 0 U; 1 Other;  
 Query Match 0.6%; Score 12; DB 1; Length 15;  
 Best Local Similarity 85.7%; Pred. No. 4.6e+02;  
 Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;  
 QY 1100 CCTGGGCTTCAGT 1113  
 |||||  
 |||||  
 DB 15 CACTGGGCTTCGGT 2  
 RESULT 778  
 ABL91842/c  
 ID ABL91842 standard; DNA; 15 BP.  
 XX  
 AC ABL91842;  
 XX  
 DT 11-JUL-2002 (first entry)  
 XX  
 DE Human LIPG gene allele specific oligonucleotide primer 21.  
 XX  
 KW Human; ss; allele specific oligonucleotide; primer;  
 KW single nucleotide polymorphism; SNP; lipase endothelial isogene; LIPG;  
 KW drug screening; atherosclerosis; cardiovascular disorder;  
 KW LIPG haplotyping; LIPG genotyping.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200216397-A2.  
 XX  
 PD 28-FEB-2002.  
 XX  
 PF 17-AUG-2001; 2001WO-US026639.  
 XX  
 PR 25-AUG-2000; 2000US-0227825P.  
 XX  
 PA (GENA-) GENAISSANCE PHARM INC.  
 XX  
 PI Duda A, Kazemi A, Kliem SE, Messer C;  
 XX  
 DR WPI; 2002-292055/33.  
 XX  
 PT Novel genetic variants of Lipase, Endothelial isogenes, useful for  
 PT improving efficiency and reliability in drug development for treating  
 PT diseases associated with LIPG activity, e.g. atherosclerosis.  
 XX  
 PS Claim 16; Page 14; 134pp; English.  
 XX  
 CC The invention comprises the DNA and amino acid sequence of the human  
 CC lipase, endothelial (LIPG) isogene. Specifically, the invention relates  
 CC to the discovery of 20 novel polymorphic sites within the LIPG gene. The  
 CC LIPG coding sequence and protein are useful for screening drugs that can  
 CC be used to treat atherosclerosis and other cardiovascular disorders. The  
 CC LIPG coding sequence can also be used to haplotype and genotype the LIPG  
 CC gene of an individual. The DNA sequences ABL91822 - ABL91861 represent  
 CC LIPG gene allele specific oligonucleotide primers  
 XX  
 SQ Sequence 15 BP; 3 A; 5 C; 4 G; 2 T; 0 U; 1 Other;  
 Query Match 0.6%; Score 12; DB 1; Length 15;  
 Best Local Similarity 85.7%; Pred. No. 4.6e+02;  
 Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;  
 QY 894 GTTGCCCTGGTCA 907  
 |||||  
 |||||  
 DB 15 GRTGACCTGGTCA 2  
 RESULT 779  
 ABK54342  
 ID ABK54342 standard; DNA; 15 BP.  
 XX  
 AC ABK54342;

XX 18-JUN-2002 (first entry)  
 XX Human SCYA26 gene allele-specific oligonucleotide sequencing primer #19.  
 DE Human; small inducible cytokine subfamily A (Cys-Cys) member 26; SCYA26;  
 DE respiratory inflammatory disease; single nucleotide polymorphism; ss;  
 KW haplotyping; haplotype pair; gene therapy; antiinflammatory; respiratory;  
 KW sequencing; primer.  
 XX Homo sapiens.  
 OS WO200216400-A2.  
 PN 28-FEB-2002.  
 XX 27-AUG-2001; 2001WO-US026664.  
 PF 25-AUG-2000; 2000US-0227965P.  
 PR (GENA-) GENAISSANCE PHARM INC.  
 XX Bieglecki KM, Han J, Kliem SE, Sausker EA;  
 PI WPI; 2002-280908/32.  
 XX Novel isolated polynucleotide which is a polymorphic variant of small  
 PT inducible cytokine subfamily A (Cys-Cys), member 26 (SCYA26) gene useful  
 PT for expressing SCYA26 protein isoform used in drug screening techniques.  
 XX Claim 16; Page 13; 79pp; English.  
 XX The invention relates to single nucleotide polymorphisms in the gene  
 CC encoding human small inducible cytokine subfamily A (Cys-Cys) member 26  
 CC (SCYA26). A method for haplotyping the SCYA26 gene in an individual  
 CC comprises identifying the nucleotide at one or more polymorphic sites and  
 CC determining whether one of the copies of the gene is defined by one of  
 CC the SCYA26 haplotypes given in the specification or whether both copies  
 CC are defined by a haplotype pair. This method is useful in genotyping,  
 CC whereby all possible haplotype pairs can be assigned to specific  
 CC genotypes. An association between a trait and a haplotype or haplotype  
 CC pair of the SCYA26 gene can be identified by comparing the frequency of  
 CC the haplotype or haplotype pair in a population exhibiting the trait with  
 CC the frequency of the haplotype or haplotype pair in a reference  
 CC population, where a higher haplotype frequency in the trait population  
 CC indicates the trait is associated with the haplotype or haplotype pair.  
 CC SCYA26 and its corresponding DNA are used for studying the expression and  
 CC diseases related to SCYA26 activity, such as respiratory inflammatory  
 CC diseases. The sequences are also useful for studying the effect of  
 CC variation on the biological activity of SCYA26 as well as on the binding  
 CC affinity of candidate drugs targeting SCYA26. Sequences ABK54324-ABK54343  
 CC represent allele-specific oligonucleotide sequencing primers used for  
 CC detecting SCYA26 gene polymorphisms  
 XX  
 SQ Sequence 15 BP; 2 A; 9 C; 2 G; 1 T; 0 U; 1 Other;  
 Query Match 0.6%; Score 12; DB 1; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 4.6e+02;  
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 1256 TCCCCACCCCC 1267  
 |||||  
 Db 2 TCCCCACCCCC 13  
 RESULT 780  
 ABX01735  
 ID ABX01735 standard; RNA; 15 BP.  
 XX  
 AC ABX01735;  
 XX  
 DT 23-DEC-2002 (first entry)

XX Hepatitis C virus (HCV) ribozyme related RNA sequence #4.  
 DE Enzymatic nucleic acid; RNA cleavage; Hepatitis C virus infection;  
 DE HCV ribozyme; HCV expression; HCV replication; cirrhosis; virucide;  
 KW liver failure; hepatocellular carcinoma; HCV infection; drug therapy;  
 KW type I interferon; interferon alpha; interferon beta; cytosolic; ss;  
 KW interferon gamma; consensus interferon; hepatotropic; antiinflammatory.  
 XX Unidentified.  
 OS US2002082225-A1.  
 PN 27-JUN-2002.  
 XX 23-MAR-1999; 99US-00274553.  
 PF 23-MAR-1999; 99US-00274553.  
 PR (BLAT/) BLATT L.  
 PA (MCSW/) MCSWIGGEN J A.  
 PA (ROBE/) ROBERTS B.  
 PA (PAVC/) PAVCO P A.  
 PA (MACE/) MACEJACK D.  
 XX Blatt L, Mcswiggen JA, Roberts B, Pavco PA, Macejack D;  
 PI WPI; 2002-617759/66.  
 DR New ribozymes targeting RNA derived from hepatitis C virus inhibit viral  
 PT replication and are useful to treat hepatitis C virus infections and  
 PT cirrhosis, liver failure or hepatocellular carcinoma.  
 XX Disclosure; SEQ ID NO 1517; 80pp; English.  
 XX The present invention relates to enzymatic nucleic acids which  
 CC specifically cleave RNA derived from Hepatitis C virus (HCV). The  
 CC enzymatic nucleic acid or ribozyme is in a hammerhead (HH) or hairpin  
 CC (HP) motif where the binding arms comprise sequences complementary to one  
 CC of the substrate sequences defined in the specification. The HCV  
 CC ribozymes are useful for modulating the expression and/or replication of  
 CC HCV. They can be used to treat cirrhosis, liver failure and/or  
 CC hepatocellular carcinoma. The HCV ribozymes are also useful for treating  
 CC a condition associated with HCV infection in conjunction with one or more  
 CC other drug therapies, particularly type I interferon, especially  
 CC interferon alpha, beta or gamma or consensus interferon. The present  
 CC sequence represents a RNA sequence of unknown function. Note: The present  
 CC sequence is given in the sequence data but is not mentioned elsewhere in  
 CC the specification. The complete sequence data for this patent was  
 CC obtained in electronic format directly from the USPTO web site at  
 CC seqdata.uspto.gov/psipdbEntry.html  
 XX  
 SQ Sequence 15 BP; 4 A; 6 C; 3 G; 0 T; 2 U; 0 Other;  
 Query Match 0.6%; Score 12; DB 1; Length 15;  
 Best Local Similarity 83.3%; Pred. No. 4.6e+02;  
 Matches 10; Conservative 2; Mismatches 0; Indels 0; Gaps 0;  
 Qy 1202 CACCCTATCAGG 1213  
 |||||  
 Db 2 CACCCTATCAGG 13  
 RESULT 781  
 AAL39492/c  
 ID AAL39492 standard; DNA; 15 BP.  
 XX  
 AC AAL39492;  
 XX  
 DT 05-SEP-2002 (first entry)  
 XX CCBP2 detecting ASO primer SEQ ID No 19.  
 XX

KW Chemokine binding protein 2; CCBP2; CCBP2 protein isoform; gene therapy;  
 KW polymorphic gene variant; single nucleotide polymorphism; human; primer;  
 KW PCR; ss.  
 XX Homo sapiens.  
 XX WO200232926-A2.  
 XX 25-APR-2002.  
 XX 12-OCT-2001; 2001WO-US042685.  
 XX 12-OCT-2000; 2000US-0239638P.  
 XX (GENA-) GENAISANCE PHARM INC.  
 XX Armstrong B, Kazemi A, Koshy B;  
 XX WPI; 2002-435524/46.  
 XX New genetic variants having polymorphisms in the chemokine binding  
 PT protein 2 (CCBP2) gene, useful for studying CCBP2 functions, and for  
 PT treating disorders affected by expression or function of the CCBP2  
 PT isogene.  
 XX Claim 14; Page 13; 84pp; English.  
 XX The invention relates to an isolated polynucleotide comprising genes and  
 CC haplotypes of the chemokine binding protein 2 (CCBP2) gene. Polymorphic  
 CC variants of the CCBP2 gene are useful in studying the expression and  
 CC function of CCBP2, and in expressing CCBP2 proteins for use in screening  
 CC candidate drugs for treating diseases associated with CCBP2 activity.  
 CC Polynucleotides comprising a polymorphic gene variant or fragment may be  
 CC used for therapeutic purposes, where a patient could benefit from  
 CC expression or increased expression of a particular CCBP2 protein isoform,  
 CC or an expression vector encoding the isoform may be administered to the  
 CC patient. Haplotype information is useful in improving the efficiency and  
 CC output of several steps in drug discovery and development process,  
 CC including target validation, identifying lead compounds, and early phase  
 CC clinical trials. The polynucleotides of the invention can be used to  
 CC treat disorders related to the CCBP2 gene by gene therapy. This  
 CC polynucleotide sequence represents a preferred ASO primer for detecting  
 CC CCBP2 gene polymorphisms relating to the invention  
 XX Sequence 15 BP; 6 A; 4 C; 2 G; 2 T; 0 U; 1 Other;  
 SQ Query Match 0.6%; Score 12; DB 1; Length 15;  
 Best Local Similarity 85.7%; Pred. No. 4.6e+02;  
 Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;  
 QY 760 CATGCAGGTTCTT 773  
 Db |:|||||||  
 15 CRTGCAGGTTGTT 2  
 RESULT 782  
 ACD66205/C  
 ID ACD66205 standard; RNA; 15 BP.  
 XX AC ACD66205;  
 XX 23-SEP-2003 (first entry)  
 XX Anti-HCV nucleic acid molecule target sequence #158.  
 XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;  
 KW RNA stability; RNA expression; RNA synthesis; antisense;  
 KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; zinczyme;  
 KW amberyne; G-cleaver ribozyme; decoy molecule; aptamer;  
 KW HBV reverse transcriptase; Enhancer I region; anti-HCV;  
 KW viral replication; degenerative; disease state; HBV infection;  
 KW HCV infection; cirrhosis; liver failure; hepatocellular carcinoma;  
 KW hepatotropic; cytostatic; virucide; antiinflammatory; target; ss.

XX Hepatitis C virus.  
 OS WO200281494-A1.  
 XX 17-OCT-2002.  
 XX 26-MAR-2002; 2002WO-US009187.  
 XX 26-MAR-2001; 2001US-00817879.  
 PR 08-JUN-2001; 2001US-00877478.  
 PR 08-JUN-2001; 2001US-0296876P.  
 PR 24-OCT-2001; 2001US-0335059P.  
 PR 05-DEC-2001; 2001US-0337055P.  
 XX (RIBO-) RIBOZYME PHARM INC.  
 PA (BLAT/) BLATT L.  
 PA (MACE/) MACEJAK D.  
 PA (MCSW/) MCSWIGGEN J.  
 PA (MORR/) MORRISSEY D.  
 PA (PAVC/) PAVCO P.  
 PA (LEBP/) LEE P.  
 PA (DRAP/) DRAPER K.  
 PA (ROBE/) ROBERTS E.  
 XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;  
 PI Draper K, Roberts E;  
 XX WPI; 2003-229207/22.  
 XX Novel compound useful for treating cirrhosis, liver failure,  
 PT hepatocellular carcinoma, or condition associated with hepatitis C virus  
 PT infection.  
 XX Claim 1; Page 320; 387pp; English.  
 PS The present invention relates to nucleic acid molecules which modulate  
 CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or  
 CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense  
 CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,  
 CC inozymes, zinczymes, amberyne, and G-cleaver ribozymes. Also disclosed  
 CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse  
 CC transcriptase and/or HBV reverse transcriptase primer sequences, as well  
 CC as oligonucleotides that specifically bind the Enhancer I region of HBV  
 CC DNA. The nucleic acids may be used to modulate the expression of HBV  
 CC genes and HBV viral replication. Also disclosed is a method for screening  
 CC compounds and/or potential therapies directed against HBV, and compounds  
 CC that modulate the expression and/or replication of HCV. The compounds and  
 CC methods of the invention are useful for the treatment of degenerative and  
 CC disease states related to HBV and HCV infection, replication and gene  
 CC expression such as cirrhosis, liver failure, and hepatocellular  
 CC carcinoma. The present sequence represents a target for one of the anti-  
 CC HCV nucleic acid molecules disclosed in the present invention  
 XX Sequence 15 BP; 2 A; 3 C; 6 G; 0 T; 4 U; 0 Other;  
 SQ Query Match 0.6%; Score 12; DB 1; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 4.6e+02;  
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1202 CACCTATCAGG 1213  
 Db |||||  
 14 CACCTATCAGG 3  
 RESULT 783  
 ACD66281  
 ID ACD66281 standard; RNA; 15 BP.  
 XX AC ACD66281;  
 XX 23-SEP-2003 (first entry)  
 XX

Anti-HCV nucleic acid molecule target sequence #199.

Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;  
RNA stability; RNA expression; RNA synthesis; antisense;  
enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; zinzyme;  
amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;  
HBV reverse transcriptase; Enhancer I region; anti-HCV;  
viral replication; degenerative; disease state; HBV infection;  
HCV infection; cirrhosis; liver failure; hepatocellular carcinoma;  
hepatotropic; cytostatic; virucide; antiinflammatory; target; ss.

Hepatitis C virus.

WO200281494-A1.

17-OCT-2002.

26-MAR-2002; 2002WO-US009187.

26-MAR-2001; 2001US-00817879.

08-JUN-2001; 2001US-00877478.

08-JUN-2001; 2001US-02968762.

24-OCT-2001; 2001US-0335059P.

05-DEC-2001; 2001US-0337055P.

(RIBO-) RIBOZYME PHARM INC.

(BLAT/) BLATT L.

(MACE/) MACEJAK D.

(MCSW/) MCSWIGGEN J.

(MORR/) MORRISSEY D.

(PAVC/) PAVCO P.

(LEEP/) LEE P.

(DRAP/) DRAPER K.

(ROBE/) ROBERTS E.

Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;

Draper K, Roberts E;

WPI; 2003-229207/22.

Novel compound useful for treating cirrhosis, liver failure,

hepatocellular carcinoma, or condition associated with hepatitis C virus

infection.

Claim 1; Page 321; 387pp; English.

The present invention relates to nucleic acid molecules which modulate

the synthesis, expression and/or stability of Hepatitis C virus (HCV) or

Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense

and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes,

inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed

are nucleic acid decoy molecules and aptamers that bind to HBV reverse

transcriptase and/or HBV reverse transcriptase primer sequences, as well

as oligonucleotides that specifically bind the Enhancer I region of HBV

DNA. The nucleic acids may be used to modulate the expression of HBV

genes and HBV viral replication. Also disclosed is a method for screening

compounds and/or potential therapies directed against HBV, and compounds  
that modulate the expression and/or replication of HCV. The compounds and  
methods of the invention are useful for the treatment of degenerative and  
disease states related to HBV and HCV infection, replication and gene  
expression such as cirrhosis, liver failure, and hepatocellular  
carcinoma. The present sequence represents a target for one of the anti-  
HCV nucleic acid molecules disclosed in the present invention

Sequence 15 BP; 4 A; 6 C; 3 G; 0 T; 2 U; 0 Other;

Query Match 0.6%; Score 12; DB 1; Length 15;

Best Local Similarity 83.3%; Pred. No. 4.6e+02;

Matches 10; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 1202 CACCTATCAGG 1213

Db 1 CACCUAUCAGG 12

RESULT 784

AAT56226/c

ID AAT56226 standard; RNA; 15 BP.

XX AC AAT56226;

XX 25-MAR-2003 (revised)

DT 14-MAY-1997 (first entry)

XX Mouse TNF-a hammerhead ribozyme target sequence (nt position 672).

XX Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;

KW gene expression; downregulation; interleukin-5; IL-5; ICAM-1;

KW intercellular adhesion molecule; rel A; tumour necrosis factor;

KW TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;

KW translocation; chronic myelogenous leukaemia; CML; cancer;

KW Philadelphia chromosome; inflammation; autoimmune disease;

KW atherosclerosis; myocardial infarction; stroke; restenosis;

KW transplant rejection; rheumatoid arthritis; psoriasis;

KW myocardial ischaemia; Kawasaki disease; septic shock; HIV;

KW human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;

ss.

XX Mus musculus.

XX WO9523225-A2.

XX 31-AUG-1995.

XX 23-FEB-1995; 95WO-IB000156.

XX 23-FEB-1994; 94US-00201109.

XX 29-MAR-1994; 94US-00218934.

XX 07-APR-1994; 94US-0022795.

XX 15-APR-1994; 94US-00224483.

XX 15-APR-1994; 94US-00227958.

XX 18-MAY-1994; 94US-00228041.

XX 16-AUG-1994; 94US-002345736.

XX 15-AUG-1994; 94US-00271280.

XX 17-AUG-1994; 94US-00291433.

XX 19-AUG-1994; 94US-00293520.

XX 02-SEP-1994; 94US-00300000.

XX 08-SEP-1994; 94US-00303039.

XX 23-SEP-1994; 94US-00311486.

XX 28-SEP-1994; 94US-00311749.

XX 03-OCT-1994; 94US-00314397.

XX 07-OCT-1994; 94US-00316771.

XX 11-OCT-1994; 94US-00319492.

XX 04-NOV-1994; 94US-00321993.

XX 10-NOV-1994; 94US-00334847.

XX 28-NOV-1994; 94US-00337608.

XX 16-DEC-1994; 94US-00345516.

XX 23-DEC-1994; 94US-00357577.

XX 30-JAN-1995; 94US-00363233.

(RIBO-) RIBOZYME PHARM INC.

Stinchcomb DT, Chowrira B, Dizenzo A, Draper KG, Dudycz LW;

Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;

Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;

Tracz D, Usman N, Wincott FE, Woolf T;

WPI; 1995-351090/45.

Ribozymes having modified bases and methods for producing them - for use

in inhibiting disease related genes.

Claim 2; Page 251; 407pp; English.

```

XX CC The present sequence represents a preferred target sequence for an
CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves TNF-alpha mRNA at
CC the nucleotide base position indicated in the DE line. Regions of the
CC mRNA that do not form secondary folding structures and that contain
CC potential hammerhead and hairpin ribozyme cleavage sites were identified
CC by computer analysis. Ribozymes directed against these mRNA sequences
CC were designed and synthesized with modifications that improve their
CC nuclease resistance. The ribozymes are designed to cleave the target
CC sequences and thereby inhibit TNF-alpha expression, making them
CC potentially useful for treating rheumatoid arthritis, septic shock and
CC other inflammatory disorders including psoriasis, as well as for
CC treatment of AIDS. (Updated on 25-MAR-2003 to correct PI field.)
XX SQ Sequence 15 BP; 1 A; 8 C; 2 G; 0 T; 4 U; 0 Other;
      Query Match          0.6%; Score 12; DB 1; Length 15;
      Best Local Similarity 100.0%; Pred. No. 4.6e+02;
      Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
      QY 71 GCAGAGAGGAGG 82
      Db 13 GCAGAGAGGAGG 2
RESULT 785
AAQ42918
ID AAQ42918 standard; DNA; 17 BP.
XX AC AAQ42918;
XX DT 07-OCT-1993 (first entry)
XX DE HLA type analysis method DPB1 primer PBFI.
XX KW Human leukocyte antigen; HLA classII gene; DNA polymerase method; ss.
XX OS Synthetic.
XX XX JP05111490-A.
XX PD 07-MAY-1993.
XX PF 02-MAR-1992; 92JP-00044935.
XX PR 29-AUG-1991; 9JP-00244530.
XX PA (SUMQ ) SUMITOMO METAL IND LTD.
XX DR WPI; 1993-184038/23.
XX FT HLA type analysis method and its reagents - includes e.g. amplification
XX of HLA class II gene, digestion by restriction enzyme, electrophoresis
XX and detection.
XX PS Example; Page 18; 21pp; Japanese.
XX CC The sequence is that of DPB1 primer PBFI which was used as part of a
CC method of HLA type analysis involving amplification of a HLA class II
CC gene, or fragments of it, using 2 or more kinds of primers by the DNA
CC polymerase method and subsequent restriction enzyme digestion and
CC analysis. The method enables easier analysis of HLA type
XX SQ Sequence 17 BP; 5 A; 6 C; 3 G; 3 T; 0 U; 0 Other;
      Query Match          0.6%; Score 12; DB 1; Length 17;
      Best Local Similarity 100.0%; Pred. No. 6.6e+02;
      Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
      QY 1182 TCCCGCGCAGAGA 1193
      Db 1 TCCCGCGCAGAGA 12

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RESULT 786
AA68749
ID AAX68749 standard; RNA; 17 BP.
XX AC AAX68749;
XX DT 28-JUL-1999 (first entry)
XX DE Human flt1 VEGF receptor hammerhead ribozyme substrate #44.
XX KW Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
XX XDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
XX tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
XX fms-like tyrosine kinase 1; kinase insert domain containing receptor;
XX foetal liver kinase 1; ss.
XX OS Homo sapiens.
XX PN WO9715662-A2.
XX PD 01-MAY-1997.
XX PF 25-OCT-1996; 96WO-US017480.
XX PR 26-OCT-1995; 95US-0005974P.
XX PR 11-JAN-1996; 96US-00584040.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PA (CHIR ) CHIRON CORP.
XX PI Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;
XX WPI; 1997-259017/23.
XX PT Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
XX stability - useful for treating e.g. tumour angiogenesis, psoriasis,
XX rheumatoid arthritis, etc., in a human patient.
XX PS Claim 4; Page 48; 218pp; English.
XX CC The present invention describes nucleic acid molecules which modulate the
XX synthesis, expression and/or stability of a mRNA encoding 1 or more
XX receptors of vascular endothelial growth factor (VEGF). A patient
XX (preferably human) having a condition associated with the level of the
XX fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
XX receptor (KDR) and/or foetal liver kinase-1 (flk-1) (e.g. tumour
XX angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
XX treated by administering the nucleic acid molecule or the expression
XX vector to the patient. AAX67275 to AAX75752 represent specific examples
XX of nucleic acid molecules from the present invention
XX SQ Sequence 17 BP; 3 A; 3 C; 4 G; 0 T; 7 U; 0 Other;
      Query Match          0.6%; Score 12; DB 1; Length 17;
      Best Local Similarity 50.0%; Pred. No. 6.6e+02;
      Matches 6; Conservative 6; Mismatches 0; Indels 0; Gaps 0;
      QY 915 TGGTCTTTGGCT 926
      Db 5 UGGUCUUUGCCU 16
RESULT 787
AAX68750
ID AAX68750 standard; RNA; 17 BP.
XX AC AAX68750;
XX DT 28-JUL-1999 (first entry)
XX DE Human flt1 VEGF receptor hammerhead ribozyme substrate #45.
XX

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DR WPI; 1997-259017/23.
XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT rheumatoid arthritis, etc., in a human patient.
XX Claim 4; Page 62; 218pp; English.
XX The present invention describes nucleic acid molecules which modulate the
CC synthesis, expression and/or stability of a mRNA encoding 1 or more
CC receptors of vascular endothelial growth factor (VEGF). A patient
CC (preferably human) having a condition associated with the level of the
CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC treated by administering the nucleic acid molecule or the expression
CC vector to the patient. AAX67275 to AAX75752 represent specific examples
CC of nucleic acid molecules from the present invention
XX
SQ Sequence 17 BP; 3 A; 3 C; 2 G; 0 T; 9 U; 0 Other;
Query Match 0.6%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 6.6e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 805 AACTGTAAGAAA 816
DB 14 AACTGTAAGAAA 3
RESULT 790
AAX68751
ID AAX68751 standard; RNA; 17 BP.
XX
AC AAX68751;
XX
DT 28-JUL-1999 (first entry)
XX
DE Human flt1 VEGF receptor hammerhead ribozyme substrate #46.
XX
KW Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW foetal liver kinase 1; ss.
XX
OS Homo sapiens.
XX
PN WO9715662-A2.
XX
PD 01-MAY-1997.
XX
PF 25-OCT-1996; 96WO-US017480.
XX
PR 26-OCT-1995; 95US-0005974P.
PR 11-JAN-1996; 96US-00584040.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (CHIR ) CHIRON CORP.
XX
PI Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;
XX WPI; 1997-259017/23.
XX
PF 25-OCT-1996; 96WO-US017480.
XX
PR 26-OCT-1995; 95US-0005974P.
PR 11-JAN-1996; 96US-00584040.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (CHIR ) CHIRON CORP.
XX
PI Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;
XX WPI; 1997-259017/23.
XX
PT Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT rheumatoid arthritis, etc., in a human patient.
XX Claim 4; Page 48; 218pp; English.
XX The present invention describes nucleic acid molecules which modulate the
CC synthesis, expression and/or stability of a mRNA encoding 1 or more
CC receptors of vascular endothelial growth factor (VEGF). A patient
CC (preferably human) having a condition associated with the level of the
CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC treated by administering the nucleic acid molecule or the expression
CC vector to the patient. AAX67275 to AAX75752 represent specific examples
CC of nucleic acid molecules from the present invention
XX
SQ Sequence 17 BP; 3 A; 3 C; 2 G; 0 T; 9 U; 0 Other;
Query Match 0.6%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 6.6e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 805 AACTGTAAGAAA 816
DB 14 AACTGTAAGAAA 3
RESULT 790
AAX68751
ID AAX68751 standard; RNA; 17 BP.
XX
AC AAX68751;
XX
DT 28-JUL-1999 (first entry)
XX
DE Human flt1 VEGF receptor hammerhead ribozyme substrate #46.
XX
KW Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW foetal liver kinase 1; ss.
XX
OS Homo sapiens.
XX
PN WO9715662-A2.
XX
PD 01-MAY-1997.
XX
PF 25-OCT-1996; 96WO-US017480.
XX
PR 26-OCT-1995; 95US-0005974P.
PR 11-JAN-1996; 96US-00584040.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (CHIR ) CHIRON CORP.
XX
PI Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;
XX WPI; 1997-259017/23.
XX
PT Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT rheumatoid arthritis, etc., in a human patient.
XX Claim 4; Page 62; 218pp; English.
XX The present invention describes nucleic acid molecules which modulate the
CC synthesis, expression and/or stability of a mRNA encoding 1 or more
CC receptors of vascular endothelial growth factor (VEGF). A patient
CC (preferably human) having a condition associated with the level of the
CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC treated by administering the nucleic acid molecule or the expression
CC vector to the patient. AAX67275 to AAX75752 represent specific examples
CC of nucleic acid molecules from the present invention
XX
SQ Sequence 17 BP; 3 A; 3 C; 2 G; 0 T; 10 U; 0 Other;
Query Match 0.6%; Score 12; DB 1; Length 17;

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Best Local Similarity 100.0%; Pred. No. 6.6e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 805 AACTGTAAGAAA 816
   |||||
Db 15 AACTGTAAGAAA 4

RESULT 792
AAV02357/C
ID AAV02357 standard; RNA; 17 BP.
XX
AC AAV02357;
XX
DT 27-AUG-2003 (revised)
DT 07-JUL-1998 (first entry)
XX
XX Pseudo-nitzschia heimii hypervariable region 3.
XX
XX Pseudo-nitzschia; hypervariable region; ribosomal RNA; toxic;
KW domoic acid; hybridisation; ss.
XX
XX Pseudo-nitzschia cf. hemeii.
OS
XX WO9744489-A1.
FN
XX 27-NOV-1997.
PD
XX
XX 22-MAY-1997; 97WO-US008768.
PF
XX 22-MAY-1996; 96US-0018143P.
PR
XX (MONT-) MONTEREY BAY AQUARIUM RES INST.
PA
XX Scholin CA, Cangelosi GA, Haydock PV;
PI
XX WPI; 1998-018539/02.
DR
XX Probes for detecting individual species of Pseudo-nitzschia algae - based
PT on hypervariable regions of ribosomal RNA, used to detect toxic species
PT in sea water and marine organisms.
XX
XX Disclosure; Page 11; 69pp; English.
PS
XX This is a probe used in the detection of Pseudo-nitzschia at species
CC level from marine samples. It is specific to P. heimii, and hybridises to
CC a hypervariable region (AAV02357) of its ribosomal RNA. It is used to
CC differentiate between toxic and non-toxic species (some species of Pseudo
CC -nitzschia produce domoic acid and this can poison humans or other
CC animals that have eaten shellfish that have consumed the algae). (Updated
CC on 27-AUG-2003 to correct OS field.)
XX
XX Sequence 17 BP; 5 A; 8 C; 2 G; 2 T; 0 U; 0 Other;
SQ

Query Match 0.6%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 6.6e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1283 ACAGCGCCACA 1294
   |||||
Db 6 ACAGCGCCACA 17

RESULT 794
AAV023740
ID AAX37240 standard; DNA; 17 BP.
XX
AC AAX37240;
XX
DT 19-JUL-1999 (first entry)
XX
XX PCR primer P1 used in nucleic acid synthesis.
DE
XX Nucleic acid synthesis; gene amplification; thermostable enzyme; PCR;
KW PCR inhibitor; PCR primer; ss.
XX
XX Synthetic.
OS
XX JP11113573-A.
PN
XX 27-APR-1999.
PD
XX
XX 17-OCT-1997; 97JP-00284889.
PF
XX 17-OCT-1997; 97JP-00284889.
PR
XX (SHVA ) SHIMADZU CORP.
PA
XX WPI; 1999-320826/27.
DR
XX
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```
Best Local Similarity 100.0%; Pred. No. 6.6e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 805 AACTGTAAGAAA 816
   |||||
Db 15 AACTGTAAGAAA 4

RESULT 793
AAV02374
ID AAV02374 standard; DNA; 17 BP.
XX
AC AAV02374;
XX
DT 27-AUG-2003 (revised)
DT 07-JUL-1998 (first entry)
XX
XX Pseudo-nitzschia heimii probe heD2-2.
DE
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```
Query Match 0.6%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 6.6e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1283 ACAGCGCCACA 1294
   |||||
Db 12 ACAGCGCCACA 1

RESULT 793
AAV02374
ID AAV02374 standard; DNA; 17 BP.
XX
AC AAV02374;
XX
DT 27-AUG-2003 (revised)
DT 07-JUL-1998 (first entry)
XX
XX Pseudo-nitzschia heimii probe heD2-2.
DE
```

PT New method for synthesis of nucleic acids - involves pre-treatment of  
PT amplification solution.  
XX  
PS Example 1; Page 3; 4pp; Japanese.  
XX  
CC The invention provides a new method for nucleic acid synthesis that  
CC comprises pre-treatment of the gene amplification reaction solution,  
CC particularly at pH 8.1 or higher, optionally having an added polyamine,  
CC with added the sample at elevated temperatures, particularly at 70-90  
CC degrees C for 5-20 minutes, maintaining the temperature stability of the  
CC thermostable enzyme. The method is used for synthesis of nucleic acids by  
CC PCR, preferably for use on living body samples. The method allows  
CC effective direct synthesis of aimed DNA in living body samples containing  
CC PCR inhibitors; no need for isolating and purifying the nucleic acid.  
CC Sequences AAX37240-241 represent PCR primers used to exemplify the method  
CC of the invention  
XX  
SQ Sequence 17 BP; 5 A; 6 C; 3 G; 3 T; 0 U; 0 Other;  
  
Query Match 0.6%; Score 12; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 6.6e+02;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 1182 TCCCGCAGAGA 1193  
Db 1 TCCCGCAGAGA 12  
  
RESULT 795  
AAA36131/C  
ID AAA36131 standard; DNA; 17 BP.  
XX  
AC AAA36131;  
XX  
DT 26-JUL-2000 (first entry)  
XX  
DE Human genomic SNP allele specific oligonucleotide SEQ ID NO:188.  
XX  
KW Human; single nucleotide polymorphism; SNP; genotyping; DNA analysis;  
KW allele specific oligonucleotide; ASO; reduced complexity genome; RCG;  
KW genomic classification; identification; DNA fingerprinting;  
KW tumour characterisation; hybridisation; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200018960-A2.  
XX  
PD 06-APR-2000.  
XX  
PF 24-SEP-1999; 99WO-US022283.  
XX  
PR 25-SEP-1998; 98US-0101757P.  
XX  
PA (MASI ) MASSACHUSETTS INST TECHNOLOGY.  
XX  
PI Landers JE, Jordan B, Housman DE, Charest A;  
XX  
DR WPI; 2000-293181/25.  
XX  
PT Detection of single nucleotide polymorphisms in genomes by preparation  
PT and analysis of reduced complexity genomes, useful for genotyping,  
PT fingerprinting and determining allele frequency of SNPs.  
XX  
PS Disclosure; Page 59; 11pp; English.  
XX  
CC A method has been developed for detecting the presence or absence of a  
CC single nucleotide polymorphism (SNP) allele in a genomic sample. The  
CC method comprises preparing a reduced complexity genome (RCG) from the  
CC genomic sample and analysing the RCG for the presence or absence of a SNP  
CC allele. The method can be used to characterise a tumour, to generate a  
CC genomic pattern for an individual genome or to generate a genomic  
CC classification code for a genome. The method can be used to assess  
CC whether a subject is at risk for developing a disease or to identify a

CC set of SNP alleles associated with a disease. The method can also be used  
CC to perform linkage analysis. AAA35944 to AAA35947 represent sequences  
CC used in the exemplification of the present invention. AAA35948 to  
CC AAA36632 represent nucleotide sequences containing SNPs  
XX  
SQ Sequence 17 BP; 1 A; 2 C; 5 G; 9 T; 0 U; 0 Other;  
  
Query Match 0.6%; Score 12; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 6.6e+02;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 736 AACACAGACACC 747  
Db 13 AACACAGACACC 2  
  
RESULT 796  
AAF02850/C  
ID AAF02850 standard; DNA; 17 BP.  
XX  
AC AAF02850;  
XX  
DT 16-FEB-2001 (first entry)  
XX  
DE Hammerhead ribozyme substrate #1145.  
XX  
KW Ribozyme; erythropoietin; granulocyte colony stimulating factor;  
KW interferon alpha; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200061729-A2.  
XX  
PD 19-OCT-2000.  
XX  
PF 11-APR-2000; 2000WO-US009721.  
XX  
PR 12-APR-1999; 99US-0129390P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
XX  
PI Blatt L, Zwick M, Pavco P, Mcswiggen J;  
XX  
DR WPI; 2000-647423/62.  
XX  
PT Enzymatic and antisense nucleic acid inhibition of repressor genes,  
PT useful for producing e.g. granulocyte colony stimulating factor protein,  
PT interferon alpha and erythropoietin.  
XX  
PS Claim 37; Page 82; 164pp; English.  
XX  
CC The present invention relates to enzymatic and antisense nucleic acid  
CC molecules that act as inhibitors of the expression of repressor genes  
CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription  
CC factor gene, IRF-2 and/or the C/EBP Displacement Protein (CDP).  
CC Inhibition of the repressors removes prevents inhibition (and  
CC consequently increases expression of) genes involved in the production of  
CC erythropoietin, granulocyte colony stimulating factor protein and  
CC interferon alpha  
XX  
SQ Sequence 17 BP; 1 A; 6 C; 6 G; 4 T; 0 U; 0 Other;  
  
Query Match 0.6%; Score 12; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 6.6e+02;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 823 GAGTGCACGAG 834  
Db 17 GAGTGCACGAG 6  
  
RESULT 797  
ABK00751

AD ABK00751 standard; RNA; 17 BP.  
XX  
AC ABK00751;  
XX  
XX 12-MAR-2002 (first entry)  
XX  
DE Human NOGO Inozyme #21.  
XX  
XX Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;  
KW cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;  
KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;  
KW DNazyme; inozyme; G-cleaver; amberyzyme; zinzyme; lymphoma; leukemia;  
KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;  
KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;  
KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;  
KW inflammatory arthropathy; central nervous system injury;  
KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;  
KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;  
KW Parkinson's disease; ataxia; Huntington's disease;  
KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
XX WO200159103-A2.  
XX  
XX 16-AUG-2001.  
XX  
XX 09-FEB-2001; 2001WO-US004273.  
XX  
XX 11-FEB-2000; 2000US-0181797P.  
XX 28-FEB-2000; 2000US-0185516P.  
XX 06-MAR-2000; 2000US-0187128P.  
XX  
XX (RIBO-) RIBOZYME PHARM INC.  
XX (BLAT/) BLATT L.  
XX (MCSW/) MCSWIGGEN J.  
XX (CHOW/) CHOWRIRA B M.  
XX  
XX Blatt L, Mcswiggen J, Chowrira BM;  
XX WPI; 2001-607195/69.  
XX  
XX Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense  
XX constructs, which down regulate expression of a CD20 gene or neurite  
XX growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and  
XX central nervous system injury.  
XX  
XX Claim 88; Page 78; 200pp; English.  
XX  
XX The invention relates to a nucleic acid molecule which down regulates  
XX expression of a CD20 gene and a nucleic acid molecule which down  
XX regulates expression of a neurite growth inhibitor gene (NOGO). The  
XX nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a  
XX DNazyme) an inozyme (an endolytic nucleic acid cleaving an RNA molecule  
XX possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or  
XX an amberyzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA  
XX with a VGY motif). The CD20-targeting nucleic acid is used to cleave RNA  
XX of CD20 in the presence of a divalent cation that is preferably Mg<sup>2+</sup>.  
XX Furthermore, it may be contacted with a cell to reduce CD20 activity of  
XX the cell and treat a patient having a condition associated with the level  
XX of CD20. The treatment may further comprise the use of one or more  
XX therapies. In particular, the CD20 targeting nucleic acid may be used to  
XX treat lymphoma, leukemia, B-cell lymphoma, low-grade or follicular non-  
XX Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic  
XX leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell  
XX lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,  
XX immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-  
XX targeting nucleic acid is used to cleave RNA of the NOGO gene in the  
XX presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, the  
XX nucleic acid may be contacted with a cell to reduce NOGO activity of the  
XX cell and treat a patient having a condition associated with the level of  
XX NOGO. The treatment may further comprise the use of one or more

CC therapies. In particular, the NOGO-targeting nucleic acid may be used to  
CC treat central nervous system (CNS) injury and cerebrovascular accident  
CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),  
CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),  
CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob  
CC disease, muscular dystrophy, and/or other neurodegenerative disease  
CC states which respond to the modulation of NOGO expression. The present  
CC sequence is an inozyme of the invention  
XX  
SQ Sequence 17 BP; 5 A; 11 C; 0 G; 0 T; 1 U; 0 Other;  
Best Match 0.6%; Score 12; DB 1; Length 17;  
Query Local Similarity 91.7%; Pred. No. 6.6e+02;  
Matches 11; Conservative 1; Mismatches 0; Gaps 0;  
Qy 1256 TCCCAACCCGCC 1267  
Db 1 UCCCAACCCGCC 12  
RESULT 798  
ADA43411  
ID ADA43411 standard; DNA; 17 BP.  
XX  
XX AC ADA43411;  
XX  
XX 20-NOV-2003 (first entry)  
XX  
XX Human asthma associated gene, AAGB, PCR primer #24.  
XX  
XX gene therapy; ss; AAGB; inflammatory disease;  
XX obstructive airways disease; adult respiratory distress syndrome; ARDS;  
XX bronchitis; human; asthma associated gene; asthma; PCR; primer.  
XX  
XX Homo sapiens.  
XX  
XX US2003104521-A1.  
XX  
XX 05-JUN-2003.  
XX  
XX 10-JUL-2001; 2001US-00902214.  
XX  
XX 13-JUL-2000; 2000US-00615247.  
XX 13-JUL-2000; 2000US-0327554P.  
XX  
XX (WHIT/) WHITTAKER P A.  
XX  
XX Whittaker PA;  
XX  
XX WPI; 2002-195799/25.  
XX  
XX Novel polypeptide encoded by disease associated gene, useful for treating  
XX an inflammatory or obstructive airways disease e.g., asthma.  
XX  
XX Example 2; Page 8; 56pp; English.  
XX  
XX The invention relates to an isolated polynucleotide designated AAGB. The  
XX polynucleotide, polypeptide, antibody and antisense oligonucleotide is  
XX useful for treating an inflammatory or obstructive airways disease. The  
XX probe is useful for detecting genetic abnormality comprising incubating a  
XX genetic sample from the subject with the polynucleotide probe, where the  
XX probe hybridises to complementary polynucleotide sequence to produce a  
XX first reaction product and comparing the first reaction product to a  
XX control reaction product obtained with a normal genetic sample, where a  
XX difference between the first reaction product and the control reaction  
XX product indicates a genetic abnormality in the subject or a  
XX predisposition to a developing a disease. Determining predisposition of a  
XX patient to asthma comprises detecting a sequence polymorphism or  
XX haplotype in the isolated polynucleotide. Other inflammatory or  
XX obstructive airways diseases include adult respiratory distress syndrome  
XX (ARDS) and bronchitis. The present sequence represents a human asthma  
XX associated gene, AAGB, PCR primer.  
XX

SQL Sequence 17 BP; 0 A; 9 C; 2 G; 6 T; 0 U; 0 Other;  
Query Match 0.6%; Score 12; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 6.6e+02;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1238 CCTCGCCTCCG 1249  
DB 2 CCTCGCCTCCG 13  
RESULT 799  
ABN00312  
ID ABN00312 standard; DNA; 17 BP.  
AC ABN00312;  
XX  
XX  
DT 29-MAY-2002 (first entry)  
XX  
XX Human GDMPLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:304.  
DE Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;  
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;  
KW skeletal muscle disorder; amplicon; screening; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO200192524-A2.  
XX  
PD 06-DEC-2001.  
XX  
XX 25-MAY-2001; 2001WO-US016981.  
XX  
XX 26-MAY-2000; 2000US-0207456P.  
PR 21-SEP-2000; 2000US-0234687P.  
PR 27-SEP-2000; 2000US-0236359P.  
PR 04-OCT-2000; 2000GB-00024263.  
PR 30-JAN-2001; 2001WO-US000661.  
PR 30-JAN-2001; 2001WO-US000662.  
PR 30-JAN-2001; 2001WO-US000663.  
PR 30-JAN-2001; 2001WO-US000664.  
PR 30-JAN-2001; 2001WO-US000665.  
PR 30-JAN-2001; 2001WO-US000666.  
PR 30-JAN-2001; 2001WO-US000667.  
PR 30-JAN-2001; 2001WO-US000668.  
PR 30-JAN-2001; 2001WO-US000669.  
PR 30-JAN-2001; 2001WO-US000670.  
PR 05-FEB-2001; 2001US-0266860P.  
XX  
XX (AEOM-) AEOMICA INC.  
XX  
XX Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;  
XX WPI; 2002-179446/23.  
XX  
XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,  
PT or as specific biomolecule capture probes for surface-enhanced laser  
PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.  
XX  
XX Disclosure; SEQ ID NO 304; 214pp; English.  
XX  
XX The present invention describes a human genome-derived myosin-like  
CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-1  
CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1  
CC nucleic acids can be used as probes to detect, characterize and quantify  
CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to  
CC provide initial substrates for the recombinant engineering of hGDMPLP-1  
CC protein variants having desired phenotypic improvements, and for  
CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be  
CC used as immunogens to raise antibodies that specifically recognise hGDMPLP  
CC -1 proteins, as standards in assays used to determine the concentration  
CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule  
CC capture probes for surface-enhanced laser desorption ionisation, as

CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1  
CC production, and in vaccines or for replacement therapy. The  
CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a  
CC disorder associated with the expression of hGDMPLP-1, in particular heart  
CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.  
CC The present sequence represents an oligomer used in the screening of the  
CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.  
CC The sequence data for this patent did not form part of the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequence  
XX  
XX Sequence 17 BP; 7 A; 2 C; 7 G; 1 T; 0 U; 0 Other;  
Query Match 0.6%; Score 12; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 6.6e+02;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1013 CTGAAAAAGAGG 1024  
DB 5 CTGAAAAAGAGG 16  
RESULT 800  
ABN00315  
ID ABN00315 standard; DNA; 17 BP.  
AC ABN00315;  
XX  
XX 29-MAY-2002 (first entry)  
XX  
XX Human GDMPLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:307.  
DE Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;  
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;  
KW skeletal muscle disorder; amplicon; screening; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO200192524-A2.  
XX  
PD 06-DEC-2001.  
XX  
XX 25-MAY-2001; 2001WO-US016981.  
XX  
XX 26-MAY-2000; 2000US-0207456P.  
PR 21-SEP-2000; 2000US-0234687P.  
PR 27-SEP-2000; 2000US-0236359P.  
PR 04-OCT-2000; 2000GB-00024263.  
PR 30-JAN-2001; 2001WO-US000661.  
PR 30-JAN-2001; 2001WO-US000662.  
PR 30-JAN-2001; 2001WO-US000663.  
PR 30-JAN-2001; 2001WO-US000664.  
PR 30-JAN-2001; 2001WO-US000665.  
PR 30-JAN-2001; 2001WO-US000666.  
PR 30-JAN-2001; 2001WO-US000667.  
PR 30-JAN-2001; 2001WO-US000668.  
PR 30-JAN-2001; 2001WO-US000669.  
PR 30-JAN-2001; 2001WO-US000670.  
PR 05-FEB-2001; 2001US-0266860P.  
XX  
XX (AEOM-) AEOMICA INC.  
XX  
XX Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;  
XX WPI; 2002-179446/23.  
XX  
XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,  
PT or as specific biomolecule capture probes for surface-enhanced laser  
PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.  
XX  
XX Disclosure; SEQ ID NO 307; 214pp; English.  
XX  
XX The present invention describes a human genome-derived myosin-like  
CC

CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-1  
 CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1  
 CC nucleic acids can be used as probes to detect, characterise and quantify  
 CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to  
 CC provide initial substrates for the recombinant engineering of hGDMPLP-1  
 CC protein variants having desired phenotypic improvements, and for  
 CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be  
 CC used as immunogens to raise antibodies that specifically recognise hGDMPLP  
 CC -1 proteins, as standards in assays used to determine the concentration  
 CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule  
 CC capture probes for surface-enhanced laser desorption/ionisation, as  
 CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1  
 CC production, and in vaccines or for replacement therapy. The  
 CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a  
 CC disorder associated with the expression of hGDMPLP-1, in particular heart  
 CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.  
 CC The present sequence represents an oligomer used in the screening of the  
 CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.  
 CC The sequence data for this patent did not form part of the printed  
 CC specification, but was obtained in electronic format directly from WIPO  
 CC at ftp.wipo.int/pub/published\_pct\_sequence  
 CC  
 CC Sequence 17 BP; 9 A; 3 C; 4 G; 1 T; 0 U; 0 Other;

Query Match 0.6%; Score 12; DB 1; Length 17;  
 Best Local Similarity 100.0%; Pred. No. 6.6e+02;  
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1013 CTGAAAAGAGG 1024

DB 2 CTGAAAAGAGG 13

RESULT 801

ABN00314  
 ID ABN00314 standard; DNA; 17 BP.

XX AC ABN00314;

XX DT 29-MAY-2002 (first entry)

XX DE Human GDMPLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:306.

XX KW Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;  
 XX muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;  
 XX skeletal muscle disorder; amplicon; screening; ss.

XX OS Homo sapiens.

XX FN WO200192524-A2.

XX PD 06-DEC-2001.

XX PF 25-MAY-2001; 2001WO-US016981.

XX PR 26-MAY-2000; 2000US-0207456P.

XX PR 21-SEP-2000; 2000US-0234687P.

XX PR 27-SEP-2000; 2000US-0236359P.

XX PR 04-OCT-2000; 2000GB-00024263.

XX PR 30-JAN-2001; 2001WO-US000661.

XX PR 30-JAN-2001; 2001WO-US000662.

XX PR 30-JAN-2001; 2001WO-US000663.

XX PR 30-JAN-2001; 2001WO-US000664.

XX PR 30-JAN-2001; 2001WO-US000665.

XX PR 30-JAN-2001; 2001WO-US000666.

XX PR 30-JAN-2001; 2001WO-US000667.

XX PR 30-JAN-2001; 2001WO-US000668.

PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;  
 XX WPI; 2002-179446/23.

XX PT New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,  
 XX or as specific biomolecule capture probes for surface-enhanced laser  
 XX desorption/ionization, comprises human myosin-like protein hGDMPLP-1.

XX PS Disclosure; SEQ ID NO 306; 214pp; English.

XX CC The present invention describes a human genome-derived myosin-like  
 CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-  
 CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1  
 CC nucleic acids can be used as probes to detect, characterise and quantify  
 CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to  
 CC provide initial substrates for the recombinant engineering of hGDMPLP-1  
 CC protein variants having desired phenotypic improvements, and for  
 CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be  
 CC used as immunogens to raise antibodies that specifically recognise hGDMPLP  
 CC -1 proteins, as standards in assays used to determine the concentration  
 CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule  
 CC capture probes for surface-enhanced laser desorption/ionisation, as  
 CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1  
 CC production, and in vaccines or for replacement therapy. The  
 CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a  
 CC disorder associated with the expression of hGDMPLP-1, in particular heart  
 CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.  
 CC The present sequence represents an oligomer used in the screening of the  
 CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.  
 CC The sequence data for this patent did not form part of the printed  
 CC specification, but was obtained in electronic format directly from WIPO  
 CC at ftp.wipo.int/pub/published\_pct\_sequence  
 CC  
 CC Sequence 17 BP; 8 A; 3 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 0.6%; Score 12; DB 1; Length 17;  
 Best Local Similarity 100.0%; Pred. No. 6.6e+02;  
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1013 CTGAAAAGAGG 1024

DB 3 CTGAAAAGAGG 14

RESULT 802

ABN00311  
 ID ABN00311 standard; DNA; 17 BP.

XX AC ABN00311;

XX DT 29-MAY-2002 (first entry)

XX DE Human GDMPLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:303.

XX KW Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;  
 XX muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;  
 XX skeletal muscle disorder; amplicon; screening; ss.

XX OS Homo sapiens.

XX FN WO200192524-A2.

XX PD 06-DEC-2001.

XX PF 25-MAY-2001; 2001WO-US016981.

XX PR 26-MAY-2000; 2000US-0207456P.

XX PR 21-SEP-2000; 2000US-0234687P.

XX PR 27-SEP-2000; 2000US-0236359P.

XX PR 04-OCT-2000; 2000GB-00024263.

XX PR 30-JAN-2001; 2001WO-US000661.

XX PR 30-JAN-2001; 2001WO-US000662.

XX PR 30-JAN-2001; 2001WO-US000663.

XX PR 30-JAN-2001; 2001WO-US000664.

XX PR 30-JAN-2001; 2001WO-US000665.

XX PR 30-JAN-2001; 2001WO-US000666.

XX PR 30-JAN-2001; 2001WO-US000667.

XX PR 30-JAN-2001; 2001WO-US000668.

(ASOM-) ASOMICA INC.





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XX Human asthma associated gene AAGB PCR primer #24.
DE XX
XX Human; asthma; AAGB; antiinflammatory; antiasthmatic; ARDS; COPD; CODA;
KW inflammatory disease; obstructive airways disease; dyspnea; emphysema;
KW adult respiratory distress syndrome; chronic bronchitis; eosinophil;
KW chronic obstructive pulmonary disease; pneumoconiosis;
KW chronic obstructive airways disease; PCR; primer; ss.
XX
OS Homo sapiens.
XX
XX W0200206312-A2.
PN XX
XX 24-JAN-2002.
PD XX
XX 11-JUL-2001; 2001WO-EP008010.
PF XX
XX 13-JUL-2000; 2000US-00615247.
PR XX
XX (NOVS ) NOVARTIS AG.
PA (NOVS ) NOVARTIS-ERFINDUNGEN VERW GES MBH.
XX
XX Whittaker PA;
PI
XX WPI; 2002-195795/25.
DR XX
XX Novel polypeptide encoded by disease associated gene, useful for treating
PT an inflammatory or obstructive airways disease e.g., asthma.
PT
XX Example 2; Page 27; 70pp; English.
PS
XX The sequence represents a PCR primer used in the invention to amplify a
XX section of the AAGB gene. The invention relates to a novel asthma-
XX associated gene AAGB and the polypeptide encoded by AAGB. The polypeptide
XX of the invention has antiinflammatory and antiasthmatic activity, and may
XX have a use in gene therapy, or as a vaccine. The polypeptide,
XX polynucleotide, antibody and antisense oligonucleotide of the invention
XX (collectively referred to as agents) are useful for treating an
XX inflammatory or obstructive airways disease. They are also useful for are
XX useful for treating adult respiratory distress syndrome (ARDS), chronic
XX obstructive pulmonary or airways disease (COPD or CODA), including
XX chronic bronchitis or dyspnea associated with it, emphysema, exacerbation
XX of airways hyper-reactivity consequent to other drug therapy and
XX pneumoconiosis. The agents are also useful in the treatment of eosinophil
XX related disorders and asthma
XX
XX Sequence 17 BP; 0 A; 9 C; 2 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 6.6e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1238 CCTCTGCGCTCG 1249
Db 2 CCTCTGCGCTCG 13
|||||
RESULT 805
AAD22095/c
ID AAD22095 standard; DNA; 17 BP.
XX
XX AAD22095;
AC
XX
XX 12-FEB-2002 (first entry)
DT
XX Human SNP2-C allele specific oligonucleotide.
DE
XX Human; Haplotype determination; single nucleotide polymorphism; SNP1;
KW P11; polymorphic locus; insulin-dependent diabetes mellitus; IDDM;
KW multiple sclerosis; Alzheimer's disease; eye colour; asthma; cancer;
KW neurofibromatosis type 2; cystic fibrosis; thalassaemia; phenylketonuria;
KW SNP1-G allele; ss.
XX

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OS Homo sapiens.
XX
XX W0200175163-A2.
PN XX
XX 11-OCT-2001.
PD XX
XX 30-MAR-2001; 2001WO-US010173.
PF XX
XX 04-APR-2000; 2000US-0194425P.
PR XX
XX (POLY-) POLYGENYX INC.
PA
XX Landers JE;
PI
XX WPI; 2002-010802/01.
DR XX
XX Haplotyping comprises separately analyzing first and second alleles of
PT first and second single nucleotide polymorphisms of two different
PT polymorphic loci, and determining haplotype based on each allele
PT identification.
XX
XX Example 1; Page 34; 77pp; English.
PS
XX The patent discloses high throughput methods for determining haplotypes.
XX Haplotyping comprises analyzing first and second alleles of a first
XX single nucleotide polymorphism (SNP1) of a first polymorphic locus (PL1)
XX by specifically capturing the nucleic acid sample on a surface,
XX separately analysing a second SNP of a polymorphic locus of a nucleic
XX acid sample to identify both alleles of SNP2, and determining the
XX haplotype based on the identification of each allele of each SNP. The
XX method is useful for haplotyping a nucleic acid within a sample. It is
XX useful for screening DNA to identify polymorphic haplotypes, and
XX identification of haplotypes associated with predisposition to diseases
XX as well as other genetically associated traits. SNP haplo- typing is
XX useful in linkage disequilibrium studies for the analysis of complex
XX traits to localised genes involved in diseases such as insulin-dependent
XX diabetes mellitus (IDDM), multiple sclerosis, Alzheimer's disease and
XX asthma, diagnostic analysis to determine the presence or absence of a
XX predisposing disease haplotype or other trait, pharmacogenomic analysis
XX to identify haplotypes that correlates with either positive or negative
XX responses to drugs and development, genome-wide scan studies for complex
XX trait analysis using SNP haplotypes, instead of single SNPs to increase
XX the statistical power. The methods of the invention are useful for
XX identifying both normal phenotypes and disease phenotypes. They are
XX useful for the identification of traits such as eye colour and for
XX diagnostics to determine presence or absence of predisposing disease
XX haplotypes such as colon cancer, breast cancer, neurofibromatosis type 2,
XX cystic fibrosis, thalassaemia and phenylketonuria. Identification of
XX haplotypes associated with phenotypic traits is useful for identifying
XX predisposition to disease. The methods are also useful in prenatal
XX screening to identify whether a foetus is afflicted with or is
XX predisposed to develop a serious disease. The present DNA sequence is an
XX oligonucleotide which is specific for human SNP2-C allele
XX
XX Sequence 17 BP; 3 A; 2 C; 9 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 6.6e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1196 TGGCACCACCCCT 1207
Db 12 TGGCACCACCCCT 1
|||||
RESULT 806
ABK18246
ID ABK18246 standard; RNA; 17 BP.
XX
XX ABK18246;
AC
XX 09-APR-2002 (first entry)
DT
XX

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DE Human ERG hammerhead ribozyme target sequence, Seq ID No 893.  
XX Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;  
XX ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;  
KW vulnary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;  
KW tumour angiogenesis; diabetic retinopathy; macular degeneration;  
KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;  
KW angiofibroma of tuberous sclerosis; port-wine stain; wound healing;  
KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;  
KW Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNazyme; inozyme;  
XX amberzyme.  
XX Homo sapiens.  
XX WO200188124-A2.  
XX 22-NOV-2001.  
XX 16-MAY-2001; 2001WO-US015866.  
XX 16-MAY-2000; 2000US-00572021.  
XX (RIBO-) RIBOZYME PHARM INC.  
XX (GLAX) GLAXO GROUP LTD.  
XX Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;  
XX WPI; 2002-082995/11.  
XX Novel polynucleotide which down regulates expression of Ets-related gene,  
XX useful for treating cancer, diabetic retinopathy, macular degeneration,  
XX arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.  
XX Claim 4; Page 75; 149pp; English.  
XX The invention relates to a nucleic acid molecule (I) which down regulates  
XX expression of an Ets-related gene (ERG). (I) is useful for treating  
XX conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,  
XX tumour angiogenesis, diabetic retinopathy, macular degeneration,  
XX neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca  
XX vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge  
XX Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu  
XX syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for  
XX treating a patient having a condition associated with the level of ERG,  
XX by contacting cells of the patient with (I) under conditions suitable for  
XX the treatment. The method comprises the use of one or more therapies  
XX under conditions suitable for the treatment. Leukaemia or tumour  
XX angiogenesis is treated by administering (I) to the patient in  
XX conjunction with one or more of other therapies such as radiation or  
XX chemotherapy treatment. (I) is useful for reducing ERG activity in a  
XX cell, by contacting the cell with (I). (I) is useful for cleaving RNA of  
XX ERG gene, by contacting (I) with RNA, in the presence of a divalent  
XX cation such as Mg2+. (I) is useful for diagnosis of conditions and  
XX diseases related to the expression of ERG, and as diagnostic tool to  
XX examine genetic drift and mutations within diseased cells or to detect  
XX the presence of ERG RNA in a cell. (I) is useful for specifically  
XX targeting genes that share homology with ERG gene or ERG fusion genes.  
XX ABK17354-ABK22719 represent nucleic acids, including antisense and  
XX enzymatic nucleic acid molecules which regulate expression of ERG, and  
XX related PCR primers of the invention  
XX Sequence 17 BP; 4 A; 8 C; 2 G; 0 T; 3 U; 0 Other;  
XX Query Match 0.6%; Score 12; DB 1; Length 17;  
XX Best Local Similarity 100.0%; Pred. No. 6.6e+02;  
XX Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1057 GCCCAACACCA 1068  
DB 5 GCCCAACACCA 16  
RESULT 807

ABK18245  
ID ABK18245 standard; RNA; 17 BP.  
XX AC ABK18245;  
XX DT 09-APR-2002 (first entry)  
XX DE Human ERG hammerhead ribozyme target sequence, Seq ID No 892.  
XX KW Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;  
KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;  
KW vulnary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;  
KW tumour angiogenesis; diabetic retinopathy; macular degeneration;  
KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;  
KW angiofibroma of tuberous sclerosis; port-wine stain; wound healing;  
KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;  
KW Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNazyme; inozyme;  
XX amberzyme.  
XX Homo sapiens.  
XX WO200188124-A2.  
XX 22-NOV-2001.  
XX 16-MAY-2001; 2001WO-US015866.  
XX 16-MAY-2000; 2000US-00572021.  
XX (RIBO-) RIBOZYME PHARM INC.  
XX (GLAX) GLAXO GROUP LTD.  
XX Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;  
XX WPI; 2002-082995/11.  
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XX neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca  
XX vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge  
XX Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu  
XX syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for  
XX treating a patient having a condition associated with the level of ERG,  
XX by contacting cells of the patient with (I) under conditions suitable for  
XX the treatment. The method comprises the use of one or more therapies  
XX under conditions suitable for the treatment. Leukaemia or tumour  
XX angiogenesis is treated by administering (I) to the patient in  
XX conjunction with one or more of other therapies such as radiation or  
XX chemotherapy treatment. (I) is useful for reducing ERG activity in a  
XX cell, by contacting the cell with (I). (I) is useful for cleaving RNA of  
XX ERG gene, by contacting (I) with RNA, in the presence of a divalent  
XX cation such as Mg2+. (I) is useful for diagnosis of conditions and  
XX diseases related to the expression of ERG, and as diagnostic tool to  
XX examine genetic drift and mutations within diseased cells or to detect  
XX the presence of ERG RNA in a cell. (I) is useful for specifically  
XX targeting genes that share homology with ERG gene or ERG fusion genes.  
XX ABK17354-ABK22719 represent nucleic acids, including antisense and  
XX enzymatic nucleic acid molecules which regulate expression of ERG, and  
XX related PCR primers of the invention  
XX Sequence 17 BP; 4 A; 8 C; 2 G; 0 T; 3 U; 0 Other;  
XX Query Match 0.6%; Score 12; DB 1; Length 17;  
XX Best Local Similarity 100.0%; Pred. No. 6.6e+02;  
XX Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 1057 GCCCAAAACCCA 1068
DB 6 GCCCAAAACCCA 17
|||||
RESULT 808
ABK18247
ID ABK18247 standard; RNA; 17 BP.
XX
AC ABK18247;
XX
DT 09-APR-2002 (first entry)
XX
DE Human ERG hammerhead ribozyme target sequence, Seq ID No 894.
XX
KW Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;
KW vulnarary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
KW tumour angiogenesis; diabetic retinopathy; macular degeneration;
KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
KW angiofibroma of tuberous sclerosis; port-wine stain; wound healing;
KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;
KW Osler-Weber-rendu syndrome; leukaemia; osteoporosis; DNazyme; inozyme;
KW amberzyme.
XX
OS Homo sapiens.
XX
PN WO200188124-A2.
XX
PD 22-NOV-2001.
XX
PF 16-MAY-2001; 2001WO-US015866.
XX
PR 16-MAY-2000; 2000US-00572021.
XX
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PA (GLAX ) GLAXO GROUP LTD.
XX
PI Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;
XX WPI; 2002-082995/11.
XX
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PT useful for treating cancer, diabetic retinopathy, macular degeneration,
PT arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
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CC tumour angiogenesis, diabetic retinopathy, macular degeneration,
CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca
CC vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge
CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu
CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for
CC treating a patient having a condition associated with the level of ERG,
CC by contacting cells of the patient with (I) under conditions suitable for
CC the treatment. The method comprises the use of one or more therapies
CC under conditions suitable for the treatment. Leukaemia or tumour
CC angiogenesis is treated by administering (I) to the patient in
CC conjunction with one or more of other therapies such as radiation or
CC chemotherapy treatment. (I) is useful for reducing ERG activity in a
CC cell, by contacting the cell with RNA. (I) is useful for cleaving RNA of
CC ERG gene, by contacting (I) with RNA, in the presence of a divalent
CC cation such as Mg2+. (I) is useful for diagnosis of conditions and
CC diseases related to the expression of ERG, and as diagnostic tool to
CC examine genetic drift and mutations within diseased cells or to detect
CC the presence of ERG RNA in a cell. (I) is useful for specifically
CC targeting genes that share homology with ERG gene or ERG fusion genes.
CC ABK17354-ABK22719 represent nucleic acids, including antisense and
CC enzymatic nucleic acid molecules which regulate expression of ERG, and
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```
CC related PCR primers of the invention
XX
SQ Sequence 17 BP; 5 A; 8 C; 2 G; 0 T; 2 U; 0 Other;
Query Match 0.6%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred.No. 6.6e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1057 GCCCAAAACCCA 1068
DB 4 GCCCAAAACCCA 15
|||||
RESULT 809
ACC54066/C
ID ACC54066 standard; DNA; 17 BP.
XX
AC ACC54066;
XX
DT 27-JUN-2003 (first entry)
XX
DE Human tumour suppressor sequence #2833.
XX
KW ss; tumour suppressor; antitumour; cytostatic; tumour suppression;
KW tumour regression; apoptosis; virus resistance; diagnosis;
KW cellular degeneration.
XX
OS Homo sapiens.
XX
PN FR2826373-A1.
XX
PD 27-DEC-2002.
XX
PF 20-JUN-2001; 2001FR-00008139.
XX
PR 20-JUN-2001; 2001FR-00008139.
XX
PA (MOLE-) MOLECULAR ENGINES LAB SA.
XX
PI Tuijnder M, Telerman A, Amson R;
XX WPI; 2003-250498/25.
XX
PT New nucleic acid sequences associated with tumor suppression, regression,
PT apoptosis or virus resistance are useful to diagnose and treat viral
PT disease, development of tumor cells and cell degeneration.
XX
PS Claim 1; Page 694; 798pp; French.
XX
CC This sequence represents an isolated nucleic acid sequence associated
CC with tumour suppression or regression, apoptosis or virus resistance. The
CC invention relates to these sequences or sequences having at least 80%
CC identity to them, and polypeptides encoded by the sequences or
CC polypeptides having 80% identity to the polypeptide sequences. The
CC invention is used to diagnose or treat viral disease or disease
CC characterized by development of tumour cells or cellular degeneration
XX
SQ Sequence 17 BP; 5 A; 3 C; 6 G; 3 T; 0 U; 0 Other;
Query Match 0.6%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred.No. 6.6e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1118 TGCCCAAGTTCCA 1129
DB 16 TGCCCAAGTTCCA 5
|||||
RESULT 810
ABT34831
ID ABT34831 standard; DNA; 17 BP.
XX
AC ABT34831;
```

```
XX 12-JUN-2003 (first entry)
XX Tumour suppression related human fukutin oligo SEQ ID No 468.
XX Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
XX antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
XX schizophrenia; protein chip; gene therapy; tumour suppression;
XX human fukutin; ds.
XX Homo sapiens.
XX WO2003025175-A2.
XX 27-MAR-2003.
XX 17-SEP-2002; 2002WO-IB004208.
XX 17-SEP-2001; 2001FR-00011978.
XX (MOLE-) MOLECULAR ENGINES LAB.
XX Telerman A, Amson R, Tuijnder M;
XX WPI; 2003-313353/30.
XX New isolated nucleic acid, useful for treating viral diseases associated
XX with tumors and cell degeneration, also related polypeptides, antibodies
XX and transfected cells.
XX Disclosure; Page 88; 720pp; French.
XX The invention relates to a novel isolated 17 mer nucleic acid sequence,
XX given in the specification, a sequence containing at least 15 consecutive
XX nucleotides from the 17 mer sequence, a sequence with, after optimal
XX alignment, at least 80 % identity to the 17 mer sequence, a sequence that
XX hybridizes to them under highly stringent conditions, or the complement
XX of any of them, or the corresponding RNA. The novel isolated nucleic
XX acids of the invention are useful as probes and primers for detecting,
XX identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
XX component of a gene chip, in vitro as (anti)sense reagents, and for
XX production of recombinant polypeptides. Any of the nucleic acids,
XX polypeptides, vectors containing the nucleic acids, cells containing the
XX vector or antibodies directed against the polypeptides are useful for
XX preparation of pharmaceuticals for prevention and/or treatment of viral
XX diseases that are characterised by development of tumours or cell
XX degeneration, specifically cancer but also Alzheimer's disease and
XX schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
XX patient samples is useful for diagnosis and/or prognosis of these
XX diseases. The polypeptides can also be used to generate antibodies, and
XX both the polypeptide and antibodies are useful as components of protein
XX chips. The nucleic acid sequences of the invention can be used in gene
XX therapy. This polynucleotide sequence represents a tumour suppression
XX related human fukutin oligonucleotide of the invention
XX Sequence 17 BP; 3 A; 10 C; 1 G; 3 T; 0 U; 0 Other;
XX Query Match 0.6%; Score 12; DB 1; Length 17;
XX Best Local Similarity 100.0%; Pred. No. 6.6e+02;
XX Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX 1091 TCACCCGCCACCC 1102
XX |||||
XX 3 TCACCCGCCACCC 14
XX RESULT 811
XX ABT35836
XX ID ABT35836 standard; DNA; 17 BP.
XX AC ABT35836;
XX DT 12-JUN-2003 (first entry)
```

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XX Tumour suppression related human fukutin oligo SEQ ID No 1473.
XX Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
XX antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
XX schizophrenia; protein chip; gene therapy; tumour suppression;
XX human fukutin; ds.
XX Homo sapiens.
XX WO2003025175-A2.
XX 27-MAR-2003.
XX 17-SEP-2002; 2002WO-IB004208.
XX 17-SEP-2001; 2001FR-00011978.
XX (MOLE-) MOLECULAR ENGINES LAB.
XX Telerman A, Amson R, Tuijnder M;
XX WPI; 2003-313353/30.
XX New isolated nucleic acid, useful for treating viral diseases associated
XX with tumors and cell degeneration, also related polypeptides, antibodies
XX and transfected cells.
XX Disclosure; Page 205; 720pp; French.
XX The invention relates to a novel isolated 17 mer nucleic acid sequence,
XX given in the specification, a sequence containing at least 15 consecutive
XX nucleotides from the 17 mer sequence, a sequence with, after optimal
XX alignment, at least 80 % identity to the 17 mer sequence, a sequence that
XX hybridizes to them under highly stringent conditions, or the complement
XX of any of them, or the corresponding RNA. The novel isolated nucleic
XX acids of the invention are useful as probes and primers for detecting,
XX identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
XX component of a gene chip, in vitro as (anti)sense reagents, and for
XX production of recombinant polypeptides. Any of the nucleic acids,
XX polypeptides, vectors containing the nucleic acids, cells containing the
XX vector or antibodies directed against the polypeptides are useful for
XX preparation of pharmaceuticals for prevention and/or treatment of viral
XX diseases that are characterised by development of tumours or cell
XX degeneration, specifically cancer but also Alzheimer's disease and
XX schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
XX patient samples is useful for diagnosis and/or prognosis of these
XX diseases. The polypeptides can also be used to generate antibodies, and
XX both the polypeptide and antibodies are useful as components of protein
XX chips. The nucleic acid sequences of the invention can be used in gene
XX therapy. This polynucleotide sequence represents a tumour suppression
XX related human fukutin oligonucleotide of the invention
XX Sequence 17 BP; 1 A; 4 C; 5 G; 7 T; 0 U; 0 Other;
XX Query Match 0.6%; Score 12; DB 1; Length 17;
XX Best Local Similarity 100.0%; Pred. No. 6.6e+02;
XX Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX 790 TGTCCTCCTCT 801
XX |||||
XX 5 TGTCCTCCTCT 16
XX RESULT 812
XX ACA06842/c
XX ID ACA06842 standard; RNA; 17 BP.
XX AC ACA06842;
XX DT 03-JUN-2003 (first entry)
XX NFKB sub-unit modulating inozyme substrate #661.
```

XX Enzymatic nucleic acid; nuclear factor kappa B; NFkB; inozyme; zinzyme;  
KW G-cleaver; amberyne; cancer; REL-A activity; breast cancer; human;  
KW lung cancer; prostate cancer; colorectal cancer; brain cancer;  
KW oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;  
KW cervical cancer; head and neck cancer; ovarian cancer; melanoma;  
KW lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;  
KW chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate;  
KW cyclophosphamide; doxorubicin; fluorouracil carboplatin; edatrexate;  
KW gencitabine; radiation therapy; inflammatory disease; asthma; diabetes;  
KW rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;  
KW gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;  
KW transplant/graft rejection; reperfusion injury; glomerulonephritis;  
KW allergic airway inflammation; inflammatory bowel disease; infection; ss.  
XX Homo sapiens.  
XX US2002177568-A1.  
XX 28-NOV-2002.  
XX 23-MAY-2001; 2001US-00864785.  
XX 07-DEC-1992; 92US-00987132.  
XX 18-MAY-1994; 94US-00245466.  
XX 15-AUG-1994; 94US-00291932.  
XX 23-DEC-1996; 96US-00777916.  
XX (STIN/) STINCHCOMB D T.  
XX (MCSW/) MCSWIGGEN J.  
XX (DRAP/) DRAPER K G.  
XX Stinchcomb DT, Mcswiggen J, Draper KG;  
XX WPI; 2003-340953/32.  
XX Novel enzymatic nucleic acid molecules which down regulates expression of  
PT a sequence encoding a subunit of nuclear factor kappa B useful for  
PT treating cancer, inflammatory disorders and autoimmune diseases.  
XX Claim 3; Page 36; 72pp; English.  
XX The invention describes an enzymatic nucleic acid molecule (I) which down  
CC regulates expression of a sequence encoding a subunit of nuclear factor  
CC kappa B (NFkB), where (I) is an inozyme, zinzyme, G-cleaver or amberyne  
CC configuration. The enzymatic nucleic acid molecule is adapted to treat  
CC cancer and is useful for down-regulating REL-A activity in a cell, for  
CC treating a patient having a condition associated with the level of REL-A.  
CC (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in  
CC the presence of a divalent cation, especially Mg<sup>2+</sup>. The enzymatic and  
CC antisense nucleic acid molecules are useful for treating breast, lung,  
CC prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,  
CC cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or  
CC multidrug resistant cancer. The method involves use of other drug  
CC therapies such as monoclonal antibodies, REL-A-specific inhibitors or  
CC chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,  
CC cyclophosphamide, doxorubicin, fluorouracil carboplatin, edatrexate,  
CC gencitabine or radiation therapy. The enzymatic and antisense nucleic  
CC acid molecules are also useful for treating inflammatory disease such as  
CC rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,  
CC obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft  
CC rejection, gene therapy applications, ischaemia/reperfusion injury  
CC (central nervous system (CNS) and myocardial), glomerulonephritis,  
CC sepsis, allergic airway inflammation, inflammatory bowel disease or  
CC infection. This sequence represents the substrate of a novel enzymatic  
CC nucleic acid molecule  
XX Sequence 17 BP; 4 A; 6 C; 4 G; 0 T; 3 U; 0 Other;  
XX Query Match 0.6%; Score 12; DB 1; Length 17;  
XX Best Local Similarity 100.0%; Pred. No. 6.6e+02;  
XX Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

887 CAGTGTCTTGC 898  
|||||||  
12 CAGTGTCTTGC 1  
RESULT 813  
ID ABZ61529 standard; RNA; 17 BP.  
XX ABZ61529;  
AC ABZ61529;  
XX 21-MAR-2003 (first entry)  
DT Human H-Ras DNzyme target #320.  
XX Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;  
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytosolic; anti-HIV;  
KW anti-rheumatic; cancer; AIDS; ss.  
XX Homo sapiens.  
XX WO200297114-A2.  
XX 05-DEC-2002.  
XX 29-MAY-2002; 2002WO-US016840.  
XX 29-MAY-2001; 2001US-0294140P.  
XX 06-JUN-2001; 2001US-0296249P.  
XX 10-SEP-2001; 2001US-0318471P.  
XX (RIBO-) RIBOZYME PHARM INC.  
XX Mcswiggen J;  
XX WPI; 2003-140484/13.  
XX Novel short interfering RNA and enzymatic nucleic acid useful for  
PT treating cancer, modulates the expression of a nucleic acid encoding  
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.  
XX Claim 58; Page 117; 185pp; English.  
XX The invention relates to a novel short interfering RNA (siRNA) nucleic  
CC acid molecule or an enzymatic nucleic acid molecule, that modulates  
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,  
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic  
CC acid molecule of the invention has cytosolic, anti-HIV, and anti-  
CC rheumatic activity. The nucleic acid molecules are useful for reducing  
CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are  
CC also useful for treating breast, ovarian, colorectal, lung, prostate,  
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences  
CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,  
CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human  
CC ribozymes of the invention  
XX Sequence 17 BP; 3 A; 7 C; 6 G; 0 T; 1 U; 0 Other;  
XX Query Match 0.6%; Score 12; DB 1; Length 17;  
XX Best Local Similarity 91.7%; Pred. No. 6.6e+02;  
XX Matches 11; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

1231 GCGACAGCCCTC 1242  
|||||||  
6 GCGACAGCCCTC 17  
RESULT 814  
ID ABZ64920/C  
XX ABZ64920 standard; RNA; 17 BP.  
XX AC ABZ64920;  
XX

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DT 21-MAR-2003 (first entry)
XX Human HER2 DNzyme substrate #377.
DE
XX
XX Human, ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytosstatic; anti-HIV;
KW anti-rheumatic; cancer; AIDS; ss.
XX
XX Homo sapiens.
XX
XX WO200297114-A2.
XX
XX 05-DEC-2002.
XX
XX 29-MAY-2002; 2002WO-US016840.
XX
XX 29-MAY-2001; 2001US-0294140P.
PR 06-JUN-2001; 2001US-0296249P.
PR 10-SEP-2001; 2001US-0318471P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Mcswiggen J;
XX
XX WPI; 2003-140494/13.
XX
XX Novel short interfering RNA and enzymatic nucleic acid useful for
PT treating cancer, modulates the expression of a nucleic acid encoding
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
XX Claim 4; Page 140; 185pp; English.
XX
XX The invention relates to a novel short interfering RNA (siRNA) nucleic
CC acid molecule or an enzymatic nucleic acid molecule, that modulates
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC acid molecule of the invention has cytostatic, anti-HIV, and anti-
CC rheumatic activity. The nucleic acid molecules are useful for reducing
CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC also useful for treating breast, ovarian, colorectal, lung, prostate,
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC ribozymes of the invention
XX
XX Sequence 17 BP; 2 A; 6 C; 5 G; 0 T; 4 U; 0 Other;
SQ
Query Match 0.6%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 6.6e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 744 CACCGTGTGCAC 755
DB 16 CACCGTGTGCAC 5
RESULT 815
ABZ61857/c
ID ABZ61857 standard; RNA; 17 BP.
XX
XX AC ABZ61857;
XX
XX 21-MAR-2003 (first entry)
XX
XX Human H-Ras DNzyme target #648.
XX
XX Human, ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytosstatic; anti-HIV;
KW anti-rheumatic; cancer; AIDS; ss.
XX
XX Homo sapiens.
XX
XX WO200297114-A2.
XX

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XX 05-DEC-2002.
XX
XX 29-MAY-2002; 2002WO-US016840.
XX
XX 29-MAY-2001; 2001US-0294140P.
PR 06-JUN-2001; 2001US-0296249P.
PR 10-SEP-2001; 2001US-0318471P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Mcswiggen J;
XX
XX WPI; 2003-140494/13.
XX
XX Novel short interfering RNA and enzymatic nucleic acid useful for
PT treating cancer, modulates the expression of a nucleic acid encoding
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
XX Claim 58; Page 123; 185pp; English.
XX
XX The invention relates to a novel short interfering RNA (siRNA) nucleic
CC acid molecule or an enzymatic nucleic acid molecule, that modulates
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC acid molecule of the invention has cytostatic, anti-HIV, and anti-
CC rheumatic activity. The nucleic acid molecules are useful for reducing
CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC also useful for treating breast, ovarian, colorectal, lung, prostate,
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC ribozymes of the invention
XX
XX Sequence 17 BP; 2 A; 1 C; 8 G; 0 T; 6 U; 0 Other;
SQ
Query Match 0.6%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 6.6e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1255 ATCCCAACCC 1266
DB 17 ATCCCAACCC 6
RESULT 816
ABZ64921/c
ID ABZ64921 standard; RNA; 17 BP.
XX
XX AC ABZ64921;
XX
XX 21-MAR-2003 (first entry)
XX
XX Human HER2 DNzyme substrate #378.
XX
XX Human, ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytosstatic; anti-HIV;
KW anti-rheumatic; cancer; AIDS; ss.
XX
XX Homo sapiens.
XX
XX WO200297114-A2.
XX
XX 05-DEC-2002.
XX
XX 29-MAY-2002; 2002WO-US016840.
XX
XX 29-MAY-2001; 2001US-0294140P.
PR 06-JUN-2001; 2001US-0296249P.
PR 10-SEP-2001; 2001US-0318471P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX

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PI Mcswiggen J;
XX WPI; 2003-140484/13.
XX
XX Novel short interfering RNA and enzymatic nucleic acid useful for
PT treating cancer, modulates the expression of a nucleic acid encoding
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
XX Claim 4; Page 140; 185pp; English.
XX
CC The invention relates to a novel short interfering RNA (siRNA) nucleic
CC acid molecule or an enzymatic nucleic acid molecule, that modulates
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC acid molecule of the invention has cytostatic, anti-HIV, and anti-
CC rheumatic activity. The nucleic acid molecules are useful for reducing
CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC also useful for treating breast, ovarian, colorectal, lung, prostate,
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC ribozymes of the invention
XX
SQ Sequence 17 BP; 2 A; 7 C; 5 G; 0 T; 3 U; 0 Other;
Query Match 0.6%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 6.6e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 744 CACGCTGTGCAC 755
DB 14 CACGCTGTGCAC 3
|||||
RESULT 817
ACD56919/c
ID ACD56919 standard; RNA; 17 BP.
XX
AC ACD56919;
XX
XX 23-SEP-2003 (first entry)
XX
DE HCV DNzyme substrate sequence #65.
XX
KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW RNA stability; RNA expression; RNA synthesis; antisense;
KW enzymatic nucleic acid; hammerhead ribozyme; DNzyme; inozyme; zinzyme;
KW amberyne; G-cleaver ribozyme; decoy molecule; aptamer;
KW HBV reverse transcriptase; Enhancer I region; viral replication;
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW virucide; antiinflammatory; substrate; ss.
XX
OS Hepatitis C virus.
XX
XX WO200281494-A1.
XX
XX 17-OCT-2002.
XX
XX 26-MAR-2002; 2002WO-US009187.
XX
XX 26-MAR-2001; 2001US-00817879.
XX
XX 08-JUN-2001; 2001US-00877478.
XX
XX 08-JUN-2001; 2001US-0296876P.
XX
XX 24-OCT-2001; 2001US-0335059P.
XX
XX 03-DEC-2001; 2001US-0337055P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX (BLAT/) BLATT L.
XX
XX (NACE/) MACEJAK D.
XX
XX (MCSW/) MCSWIGGEN J.
XX
XX (MORR/) MORRISSEY D.
XX
XX (PAVC/) PAVCO P.

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PA (LEEP/) LEE P.
PA (DRAP/) DRAPER K.
PA (ROBE/) ROBERTS E.
XX
XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
PI Draper K, Roberts E;
XX WPI; 2003-229207/22.
XX
XX Novel compound useful for treating cirrhosis, liver failure,
PT hepatocellular carcinoma, or condition associated with hepatitis C virus
PT infection.
XX
XX Claim 1; Page 235; 387pp; English.
XX
CC The present invention relates to nucleic acid molecules which modulate
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNzymes,
CC inozymes, zinzymes, amberyne, and G-cleaver ribozymes. Also disclosed
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC as oligonucleotides that specifically bind the Enhancer I region of HBV
CC DNA. The nucleic acids may be used to modulate the expression of HBV
CC genes and HBV viral replication. Also disclosed is a method for screening
CC compounds and/or potential therapies directed against HBV, and compounds
CC that modulate the expression and/or replication of HCV. The compounds and
CC methods of the invention are useful for the treatment of degenerative and
CC disease states related to HBV and HCV infection, replication and gene
CC expression such as cirrhosis, liver failure, and hepatocellular
CC carcinoma. The present sequence represents a substrate for one of the HCV
CC DNzyme or minus strand DNzyme sequences disclosed in the present
CC invention
XX
SQ Sequence 17 BP; 3 A; 4 C; 6 G; 0 T; 4 U; 0 Other;
Query Match 0.6%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 6.6e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1202 CACCCCTATCAGG 1213
DB 16 CACCCCTATCAGG 5
|||||
RESULT 818
ACC65606
ID ACC65606 standard; DNA; 17 BP.
XX
XX ACC65606;
XX
XX 01-JUL-2003 (first entry)
XX
XX Murine oligonucleotide associated with tumour supression, SEQ ID 2853.
XX
XX Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;
XX tumour suppression; tumour reversion; apoptosis; virus resistance;
XX viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
XX schizophrenia; ss.
XX
XX Mus musculus.
XX
XX WO2003025176-A2.
XX
XX 27-MAR-2003.
XX
XX 17-SEP-2002; 2002WO-IB004210.
XX
XX 17-SEP-2001; 2001FR-00011979.
XX
XX (MOLE-) MOLECULAR ENGINES LAB.
XX
XX Telerman A, Amson R, Tuijnder M;

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XX WPI; 2003-333167/31.  
XX New isolated nucleic acid, useful for treating viral diseases associated  
PT with tumors and cell degeneration, also related polypeptides, antibodies  
PT and transfected cells.  
XX  
XX Disclosure; Page 364; 738pp; French.  
XX  
XX The present invention relates to murine oligonucleotides (ACC62754-  
CC ACC68806), which are associated with tumour suppression, tumour  
CC reversion, apoptosis and virus resistance. The oligonucleotides are  
CC useful as (1) as probes and primers for detecting, identifying,  
CC quantifying and/or amplifying nucleic acid, e.g. as one component of a  
CC gene chip; in vitro as (anti)sense reagents; and (2) for production of  
CC recombinant polypeptides. The oligonucleotides are useful for preparation  
CC of pharmaceuticals for prevention and/or treatment of viral diseases that  
CC are characterised by development of tumours or cell degeneration,  
CC specifically cancer but also Alzheimer's disease and schizophrenia  
XX  
XX Sequence 17 BP; 3 A; 12 C; 1 G; 1 T; 0 U; 0 Other;  
SQ

Query Match 0.6%; Score 12; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 6.6e+02;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1091 TCACCCGCCACCC 1102  
Db 3 TCACCCGCCACCC 14  
|||||  
RESULT 819  
ACC65172  
ID ACC65172 standard; DNA; 17 BP.  
XX  
XX ACC65172;  
AC  
XX  
XX 01-JUL-2003 (first entry)  
XX  
XX Murine oligonucleotide associated with tumour suppression, SEQ ID 2419.  
XX  
XX Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;  
KW tumour suppression; tumour reversion; apoptosis; virus resistance;  
KW viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;  
KW schizophrenia; ss.  
XX  
XX Mus musculus.  
OS  
XX  
XX WO2003025176-A2.  
XX  
XX 27-MAR-2003.  
XX  
XX 17-SEP-2002; 2002WO-IB004210.  
XX  
XX 17-SEP-2001; 2001FR-00011979.  
XX  
XX (MOLE-) MOLECULAR ENGINES LAB.  
XX  
XX Telerman A, Amson R, Tuijinder M;  
PI  
XX WPI; 2003-333167/31.  
XX  
XX New isolated nucleic acid, useful for treating viral diseases associated  
PT with tumors and cell degeneration, also related polypeptides, antibodies  
PT and transfected cells.  
XX  
XX Disclosure; Page 313; 738pp; French.  
XX  
XX The present invention relates to murine oligonucleotides (ACC62754-  
CC ACC68806), which are associated with tumour suppression, tumour  
CC reversion, apoptosis and virus resistance. The oligonucleotides are  
CC useful as (1) as probes and primers for detecting, identifying,  
CC quantifying and/or amplifying nucleic acid, e.g. as one component of a  
XX

CC gene chip; in vitro as (anti)sense reagents; and (2) for production of  
CC recombinant polypeptides. The oligonucleotides are useful for preparation  
CC of pharmaceuticals for prevention and/or treatment of viral diseases that  
CC are characterised by development of tumours or cell degeneration,  
CC specifically cancer but also Alzheimer's disease and schizophrenia  
XX  
XX Sequence 17 BP; 3 A; 3 C; 3 G; 8 T; 0 U; 0 Other;  
SQ

Query Match 0.6%; Score 12; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 6.6e+02;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 900 CCTGGTCATTTT 911  
Db 4 CCTGGTCATTTT 15  
|||||  
RESULT 820  
AAL51596  
ID AAL51596 standard; DNA; 17 BP.  
XX  
XX AAL51596;  
AC  
XX  
XX 10-APR-2003 (first entry)  
XX  
XX Human serine/threonine protein kinase NEK1 PCR primer #1.  
DE  
XX  
XX Human; PCR; primer; ss; gene therapy; serine/threonine protein kinase;  
KW cancer; colon cancer; cardiovascular disorder; congestive heart failure;  
KW central nervous system disorder; chronic obstructive pulmonary disease;  
KW CNS disorder; diabetes; myocardial infarction; ischaemic heart disease;  
KW arrhythmia; hypertensive; Alzheimer's disease; Parkinson's disease; NEK1;  
KW peripheral pain; chronic pain.  
XX  
XX Homo sapiens.  
OS  
XX  
XX WO2003000873-A2.  
XX  
XX 03-JAN-2003.  
XX  
XX 21-JUN-2002; 2002WO-EP006879.  
XX  
XX 25-JUN-2001; 2001US-0300071P.  
XX  
XX 16-NOV-2001; 2001US-0331447P.  
XX  
XX 07-DEC-2001; 2001US-0336693P.  
XX  
XX (FARB ) BAYER AG.  
XX  
XX Xiao Y;  
XX  
XX WPI; 2003-201424/19.  
XX  
XX New serine/threonine protein kinase NEK1 gene and protein, useful for  
PT identifying modulators of serine/threonine protein kinase NEK1 activity,  
PT and in gene therapy for treating cancer, diabetes, heart failure or  
PT Alzheimer's disease.  
XX  
XX Example 12; Page 97; 156pp; English.  
XX  
XX The invention comprises the amino acid and coding sequence of the human  
CC serine/threonine protein kinase NEK1. The DNA and protein sequences of  
CC the invention are useful for modulating the activity of serine/threonine  
CC kinase NEK1 in a disease, such as: cancer (particularly colon cancer);  
CC cardiovascular disorders; central nervous system (CNS) disorders;  
CC diabetes; and chronic obstructive pulmonary disease. In particular the  
CC DNA and protein sequences of the invention are useful for treating:  
CC congestive heart failure; myocardial infarction; ischaemic heart disease;  
CC arrhythmia; hypertensive; Alzheimer's disease; Parkinson's disease; and  
CC peripheral or chronic pain. The present DNA sequence represents a PCR  
CC primer for the human serine/threonine protein kinase NEK1 coding sequence  
XX  
XX Sequence 17 BP; 4 A; 8 C; 3 G; 2 T; 0 U; 0 Other;  
SQ



```

Query Match          0.6%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 6.6e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1053 CCTGCCGCCAAA 1064
DB 5 CCTGCCGCCAAA 16

RESULT 821
AAZ48536
ID AAZ48536 standard; DNA; 18 BP.
XX AC AAZ48536;
XX DT 31-MAR-2000 (first entry)
XX DE Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18929.
XX KW Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;
XX KW inflammation; tumour formation; TNFR1; anticancer; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX FN US6007995-A.
XX PD 28-DEC-1999.
XX PF 26-JUN-1998; 98US-00106038.
XX PR 26-JUN-1998; 98US-00106038.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Baker BF, Cowsett LM;
XX DR WPI; 2000-105333/09.
XX PT Antisense inhibition of tumor necrosis factor type 1 expression for
XX PT diagnosis, treatment and prevention of disease, particularly tumors.
XX PS Claim 1; Col 25; 34pp; English.
XX CC The invention provides antisense compounds targeted to human tumour
XX CC necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds
XX CC can be used in a method of inhibiting the expression of TNFR1 human cells
XX CC or tissues. The antisense compounds specifically hybridize with one or
XX CC more nucleic acids encoding TNFR1 modulating the function of nucleic acid
XX CC molecules encoding TNFR1, ultimately modulating the amount of TNFR1
XX CC produced. The antisense compounds and method are useful as research
XX CC reagents and diagnostics, and in the treatment and prophylaxis of
XX CC infection, inflammation or tumour formation. Sequences AAZ48482-565
XX CC represent antisense oligos used for inhibition of the human TNFR1 mRNA
XX CC
SQ Sequence 18 BP; 4 A; 3 C; 8 G; 3 T; 0 U; 0 Other;

Query Match          0.6%; Score 12; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 7.8e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 816 AAGCTGGAGTG 827
DB 2 AAGCTGGAGTG 13

RESULT 822
ABT05032
ID ABT05032 standard; DNA; 18 BP.
XX AC ABT05032;
XX DT 11-OCT-2002 (first entry)
XX DE Phosphorothioate oligonucleotide for AIDS therapy.
XX DE Phosphorothioate; HIV-1; azasugar; AIDS; virucide; antiviral; anti-HIV;
XX KW therapy; ss.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX FT modified_base 1..20
XX FT /tag= a
XX FT /mod_base= OTHER
XX FT /note= "phosphorothioate linkage"

```

TNFR1 expression modulation related antisense oligo SEQ ID No 62.  
 Antisense compound; tumour necrosis factor receptor 1; liver disease;  
 TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;  
 human; ds.  
 Homo sapiens.  
 WO200248168-A1.  
 20-JUN-2002.  
 22-OCT-2001; 2001WO-US051224.  
 24-OCT-2000; 2000US-00695451.  
 (ISIS-) ISIS PHARM INC.  
 Baker BF, Cowsett LM, Zhang H, Dean NM;  
 WPI; 2002-593481/62.  
 Novel antisense compound targeted to nucleic acid molecule encoding tumor  
 necrosis factor receptor 1 (TNFR1), useful for treating humans having  
 disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.  
 Example 10; Page 45; 121pp; English.  
 The invention relates to an antisense compound 8 to 30 nucleotides in  
 length targeted to nucleic acid molecule encoding tumour necrosis factor  
 receptor 1 (TNFR1), where the antisense compound inhibits expression of  
 TNFR1. The antisense compound is useful for inhibiting the expression of  
 TNFR1 in cells or tissues. The antisense compound is also useful for  
 treating an animal (preferably human) having a disease or condition  
 associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver  
 injury) or a hyperproliferative disorder such as cancer, by inhibiting  
 the expression of TNFR1. The antisense compound is useful for  
 diagnostics, therapeutics, prophylaxis and as research reagents and kits.  
 This polynucleotide sequence represents a human oligonucleotide relating  
 to the TNFR1 of the invention  
 Sequence 18 BP; 4 A; 3 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.6%; Score 12; DB 1; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 7.8e+02;  
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 816 AAGCTGGAGTG 827  
 DB 2 AAGCTGGAGTG 13  
 RESULT 823  
 ABEV73834/C  
 ID ABEV73834 standard; DNA; 20 BP.  
 XX AC ABEV73834;  
 XX DT 08-JAN-2003 (first entry)  
 XX DE Phosphorothioate oligonucleotide for AIDS therapy.  
 XX DE Phosphorothioate; HIV-1; azasugar; AIDS; virucide; antiviral; anti-HIV;  
 KW therapy; ss.  
 XX OS Synthetic.  
 XX FH Key Location/Qualifiers  
 XX FT modified\_base 1..20  
 XX FT /tag= a  
 XX FT /mod\_base= OTHER  
 XX FT /note= "phosphorothioate linkage"

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FT modified_base 1 /tag= b
FT /mod_base= OTHER
FT modified_base 7 /tag= c
FT /mod_base= OTHER
FT modified_base 13 /tag= d
FT /mod_base= OTHER
FT modified_base 19 /tag= e
FT /mod_base= OTHER
FT /note= "azasugar-containing adenosine derivative"
XX WO200268582-A2.
XX
XX 06-SEP-2002.
XX
XX 27-FEB-2002; 2002WO-KR000325.
XX
XX 27-FEB-2001; 2001KR-00009914.
XX
XX (DONG-) DONGBU HANNONG CHEM CO LTD.
XX
XX Bae Y, Lee D, Lim H, Kim S, Lee K, Jung K;
XX WPI; 2002-750412/81.
XX
XX New phosphorothioate oligonucleotides useful in the treatment of AIDS.
XX
XX Claim 3; Page 41; 120pp; English.
XX
XX The present sequence is that of a phosphorothioate oligonucleotide of
XX random sequence which includes 4 six-membered azasugar nucleotide
XX derivatives. It is a claimed example of oligonucleotides of the invention
XX (see ABV73816-41) that have been tested as AIDS therapeutic agents. In
XX anti-HIV-1 assays, the oligonucleotide showed higher antiviral activity
XX than AZT, ddC and ddI, and antiviral activity was resistant to the
XX effects of serum. Claimed oligonucleotides of the present invention have
XX low toxicity against cells, are membrane permeable, working outside of
XX cells to inhibit viral attachment of HIV, have a wide antiviral activity
XX against a broad spectrum of HIV variants, are not active against other
XX viruses including HIV. The resistance of the present oligonucleotide to
XX serum allows its use as an AIDS therapeutic drug in vivo
XX
XX Sequence 20 BP; 4 A; 9 C; 4 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 12; DB 1; Length 20;
XX Best Local Similarity 75.0%; Pred. No. 1e+03;
XX Matches 15; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
XX
XX QY 280 CTGCTGCTGCGCTGCTGCT 299
XX ||||| ||||| ||||| |||||
XX Db 20 CTGAGCTGGAGCTGGAGCT 1
XX
XX RESULT 824
XX AAV55821/c
XX ID AAV55821 standard; DNA; 24 BP.
XX
XX AC AAV55821;
XX
XX 27-AUG-2003 (revised)
XX 18-NOV-1998 (first entry)
XX
XX DE Multimerisation of minimal motifs using primer ZGY2.
XX
XX Fusion protein; stabilising polypeptide; proteolytic degradation;
XX resistance; half-life; autoimmune disease; inflammation; nitro drug;
XX IkappaB regulator protein; inflammatory bowel disease; in vivo imaging;

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KW nitroreductase protein; enzyme therapy; prodrug therapy; protease;
KW cancer; pathological condition; minimal motif; PCR primer; ss.
XX
XX Synthetic.
XX Human herpesvirus 4.
XX
XX WO9822577-A1.
XX
XX 28-MAY-1998.
XX
XX 17-NOV-1997; 97WO-IB001508.
XX
XX 15-NOV-1996; 96US-0030986P.
XX
XX 25-JUN-1997; 97US-0048945P.
XX
XX (MASU/) MASUCCI M G.
XX
XX Masucci MG;
XX
XX WPI; 1998-312463/27.
XX
XX New fusion proteins resistant to proteolytic degradation - comprising a
XX core protein with a stabilising polypeptide comprising a peptide sequence
XX containing glycine repeats.
XX
XX Disclosure; Page 72; 120pp; English.
XX
XX Sequences shown in AAV55812 to AAV55827 represent primers used in the
XX course of the invention for the multimerisation of minimal motifs. The
XX invention provides a method for increasing the resistance of a core
XX protein to proteolytic degradation that comprises linking or inserting
XX onto or into the core protein a stabilising polypeptide of formula
XX [(Gly)X(Glyb)Y(Glyc)Z]n where Glya, Glyb, Glyc are 1-6 sequential Gly
XX residues and X, Y, Z are Ala, Ser, Val, Ile, Leu, Met, Phe, Pro or Thr
XX and n can be anything between 1-66. X, Y and Z need not be identical from
XX n repeat to n repeat. Alternatively a nucleic acid encoding a stabilising
XX polypeptide can be linked onto or inserted into a nucleic acid encoding a
XX core protein. The fusion proteins of the invention are more resistant to
XX degradation by proteases and, thus, have a longer half-life than the
XX unfused core protein. The products can be used for treating autoimmune
XX diseases, cancer and inflammation. In particular, the core protein may be
XX an IkappaB regulator protein for the treatment of inflammatory bowel
XX disease, or a nitroreductase protein which can activate nitro drugs in
XX enzyme/prodrug therapy to treat cancer or other pathological conditions.
XX The fusion proteins can also be used in diagnostic methods such as in
XX vivo imaging. (Updated on 27-AUG-2003 to correct OS field.)
XX
XX Sequence 24 BP; 5 A; 13 C; 2 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 12; DB 1; Length 24;
XX Best Local Similarity 75.0%; Pred. No. 1.5e+03;
XX Matches 15; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
XX
XX QY 1508 TGGAGCTGCTGGAGCTGGAGCTG 1527
XX ||||| ||||| ||||| |||||
XX Db 23 TGGAGCTGGAGCTGGAGCTG 4
XX
XX RESULT 825
XX AAT29547/c
XX ID AAT29547 standard; DNA; 14 BP.
XX
XX AC AAT29547;
XX
XX 20-DEC-1996 (first entry)
XX
XX Primer #8 for FseI modification methylation.
XX
XX Restriction endonuclease; FseI; modification methylation; palindromic DNA;
XX Fraklia species NRRL 18528; cytosine methylase; 5-methyl cytosine motif;
XX alpha-N4 cytosine motif; beta-N4 cytosine methylase motif; enzyme; PCR;
XX DNA cloning; primer; amplify; polymerase chain reaction; ss.
XX
XX

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OS Synthetic.
XX EP712933-A2.
PN
XX
XX 22-MAY-1996.
PD
XX
XX 12-OCT-1995; 95BP-00307228.
PF
XX 18-OCT-1994; 94US-00325509.
PR
XX (NEWE ) NEW ENGLAND BIOLABS INC.
PA
XX Morgan RD;
PI
XX WPI; 1996-240719/25.
DR
XX DNA encoding restriction endonuclease FseI - useful in DNA manipulation,
PT also new method for cloning endonuclease and associated methylase.
PT
XX Example 1; Page 10; 36pp; English.
PS
XX AAT29540-T29559 represent amplification primers for the FseI modification
CC methylase. These sequence are all based on cytosine methylase conserved
CC sequences. AAT29540-T29549 are based on the 5-methyl-cytosine motif.
CC AAT29550 and AAT29551 are based on the alpha type of N-4 cytosine
CC methylase motifs, while AAT29552-T29559 are based on the beta type of N-4
CC cytosine methylase motifs. The FseI modification methylase, and
CC restriction endonuclease was isolated from Frankia species NRRL 18528.
CC FseI recognises the palindromic DNA sequence GGCGGCC (from 5' to 3'),
CC and cleaves it between the second GC to leave a 4 base 3' overhang. The
CC FseI modification methylase contains copies of the 5-methyl cytosine,
CC alpha-N4 cytosine, and beta-N4 cytosine methylase motifs. The methylase
CC and endonuclease genes were observed to overlap by 12 nucleotides. This
CC enzyme can be used for cloning and rearranging DNA, the same as known
CC restriction enzymes. Recombinant expression of FseI allows for over
CC expression of this enzyme in pure form, without the contaminants present
CC in conventional preparation methods
XX
XX Sequence 14 BP; 1 A; 4 C; 0 G; 5 T; 0 U; 4 Other;
SQ
Query Match 0.5%; Score 11.8; DB 1; Length 14;
Best Local Similarity 71.4%; Pred. No. 4.1e+02;
Matches 10; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
QY 853 GAGAACTTTAAGG 866
DB 14 GAAAYGTNAAGG 1
RESULT 826
AAQ43440/C
ID AAQ43440 standard; DNA; 15 BP.
XX
XX AAQ43440;
AC
XX
XX 10-DEC-1993 (first entry)
DT
XX
XX Tumour-related protein detecting probe.
DE
XX Tumour-related protein; silencer; catalase; cancer; diagnosis; ds.
KW
XX Synthetic.
XX
XX JF05146294-A.
PN
XX 15-JUN-1993.
PD
XX
XX 27-NOV-1991; 91JP-00312476.
PF
XX
XX 27-NOV-1991; 91JP-00312476.
PR
XX (SANY ) SANKYO CO LTD.
PA
XX
XX

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DR WPI; 1993-223532/28.
XX
XX Tumour-related protein binding to silencer sequence of rat liver catalase
PT gene - for measuring mRNA expression in cancer cells for diagnosing
PT cancer.
XX
XX Disclosure; Page 3; 16pp; Japanese.
PS
XX The 5' end of the antisense strand overhangs the sense strand by 5 bases.
CC mRNA was prepd. from rat AHe60c strain. cDNA library was prepd. using
CC lambda gt12 and lambda ZAP. The probe was 32P labelled. pKX233-2 was used
CC as expression vector. The vector was digested by NcoI and HindIII for
CC ligation and pSW35-1 was obtained
XX
XX Sequence 15 BP; 1 A; 0 C; 11 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.5%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 5.1e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1052 CCCTGGCCCCCAACC 1066
DB 15 CCCTCCCCCAACC 1
RESULT 827
AAT55041
ID AAT55041 standard; RNA; 15 BP.
XX
XX AAT55041;
AC
XX 25-MAR-2003 (revised)
DT 18-APR-1997 (first entry)
XX
XX Human rclA hammerhead ribozyme target sequence (nt. position 335).
DE
XX Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
KW gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
KW intercellular adhesion molecule; rel A; tumour necrosis factor;
KW INF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
KW translocation; chronic myelogenous leukaemia; CML; cancer;
KW Philadelphia chromosome; inflammation; autoimmune disease;
KW atherosclerosis; myocardial infarction; stroke; restenosis;
KW transplant rejection; rheumatoid arthritis; psoriasis;
KW myocardial ischaemia; Kawasaki disease; septic shock; HIV;
KW human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
XX ss.
XX
XX Homo sapiens.
OS
XX
XX WO9523225-A2.
PN
XX
XX 31-AUG-1995.
PD
XX
XX 23-FEB-1995; 95WO-IB000156.
PF
XX
XX 23-FEB-1994; 94US-00201109.
PR 23-MAR-1994; 94US-00218934.
PR 04-APR-1994; 94US-00222795.
PR 07-APR-1994; 94US-00224483.
PR 15-APR-1994; 94US-00227958.
PR 15-APR-1994; 94US-00228041.
PR 18-MAY-1994; 94US-00245736.
PR 06-JUL-1994; 94US-00271280.
PR 15-AUG-1994; 94US-00291932.
PR 16-AUG-1994; 94US-00291433.
PR 17-AUG-1994; 94US-00292620.
PR 19-AUG-1994; 94US-00293520.
PR 02-SEP-1994; 94US-00300000.
PR 08-SEP-1994; 94US-00303039.
PR 23-SEP-1994; 94US-00311486.
PR 23-SEP-1994; 94US-00311749.
PR 28-SEP-1994; 94US-00314397.

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PR 03-OCT-1994; 94US-00316771.
PR 07-OCT-1994; 94US-00319492.
PR 11-OCT-1994; 94US-00321993.
PR 04-NOV-1994; 94US-00334847.
PR 10-NOV-1994; 94US-00337608.
PR 28-NOV-1994; 94US-00345516.
PR 16-DEC-1994; 94US-00357577.
PR 23-DEC-1994; 94US-00363233.
PR 30-JAN-1995; 95US-00380734.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
XX Stinchcomb DT, Chowrira B, Drenzo A, Draper KG, Dudycz LW;
PI Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, McSwiggen JA;
PI Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
PI Tracz D, Usman N, Wincott FE, Woolf T;
XX
XX WPI; 1995-351090/45.
XX
XX Ribozymes having modified bases and methods for producing them - for use
PT in inhibiting disease related genes.
XX
PS Claim 2; Page 228; 407pp; English.
XX
XX The present sequence represents a preferred target sequence for an
CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves relA mRNA at the
CC nucleotide base position indicated in the DE line. The relA gene product
CC is a subunit of the transcriptional regulator NF-kappaB and is implicated
CC specifically in the induction of inflammatory responses. Regions of the
CC mRNA that do not form secondary folding structures and that contain
CC potential hammerhead and hairpin ribozyme cleavage sites were identified
CC by computer analysis. Ribozymes directed against these mRNA sequences
CC were designed and synthesised with modifications that improve their
CC nuclease resistance. The ribozymes are designed to cleave the target
CC sequences and thereby inhibit relA expression, making them potentially
CC useful for treating rheumatoid arthritis, restenosis and asthma as well
CC as for increasing tolerance to transplanted tissues. The potential
CC immunosuppressive properties of a ribozyme that cleaves relA mRNA means
CC that uses are limited to local delivery, acute indications or ex vivo
CC treatment. (Updated on 25-MAR-2003 to correct PI field.)
XX
XX Sequence 15 BP; 2 A; 10 C; 2 G; 0 T; 1 U; 0 Other;
SQ
Query Match 0.5%; Score 11.8; DB 1; Length 15;
Best Local Similarity 80.0%; Pred. No. 5.1e+02;
Matches 12; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
QY 1085 CAGGCTTCACCCCA 1099
DB 1 CCGGCCUCACCCCA 15
DE
RESULT 828
AAT54833/c
ID AAT54833 standard; RNA; 15 BP.
XX
XX AAT54833;
AC
XX
XX 25-MAR-2003 (revised)
DT
DT 07-APR-1997 (first entry)
XX
XX Mouse relA hammerhead ribozyme target sequence (nt. position 616).
DE
XX Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
KW gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
KW intercellular adhesion molecule; rel A; tumour necrosis factor;
KW TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
KW translocation; chronic myelogenous leukaemia; CML; cancer;
KW Philadelphia chromosome; inflammation; autoimmune disease;
KW atherosclerosis; myocardial infarction; stroke; restenosis;
KW transplant rejection; rheumatoid arthritis; psoriasis;
KW myocardial ischaemia; Kawasaki disease; septic shock; HIV;
KW human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;

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KW ss.
XX Mus musculus.
OS
XX W09523225-A2.
PN
XX 31-AUG-1995.
PD
XX 23-FEB-1995; 95WO-IB000156.
PF
XX 23-FEB-1994; 94US-00201109.
XX 29-MAR-1994; 94US-00218934.
PR 04-APR-1994; 94US-00222795.
PR 07-APR-1994; 94US-00224483.
PR 15-APR-1994; 94US-00227958.
PR 15-APR-1994; 94US-00228041.
PR 18-MAY-1994; 94US-00245736.
PR 06-JUL-1994; 94US-00271280.
PR 15-AUG-1994; 94US-00291932.
PR 16-AUG-1994; 94US-00291433.
PR 17-AUG-1994; 94US-00292620.
PR 19-AUG-1994; 94US-00293520.
PR 02-SEP-1994; 94US-00300000.
PR 08-SEP-1994; 94US-00303039.
PR 23-SEP-1994; 94US-00311486.
PR 23-SEP-1994; 94US-00311749.
PR 28-SEP-1994; 94US-00314397.
PR 03-OCT-1994; 94US-00316771.
PR 07-OCT-1994; 94US-00319492.
PR 11-OCT-1994; 94US-00321993.
PR 04-NOV-1994; 94US-00334847.
PR 10-NOV-1994; 94US-00337608.
PR 28-NOV-1994; 94US-00345516.
PR 16-DEC-1994; 94US-00357577.
PR 23-DEC-1994; 94US-00363233.
PR 30-JAN-1995; 95US-00380734.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Stinchcomb DT, Chowrira B, Drenzo A, Draper KG, Dudycz LW;
PI Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, McSwiggen JA;
PI Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
PI Tracz D, Usman N, Wincott FE, Woolf T;
XX
XX WPI; 1995-351090/45.
XX
XX Ribozymes having modified bases and methods for producing them - for use
PT in inhibiting disease related genes.
XX
PS Claim 2; Page 225; 407pp; English.
XX
XX The present sequence represents a preferred target sequence for an
CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves relA mRNA at the
CC nucleotide base position indicated in the DE line. The relA gene product
CC is a subunit of the transcriptional regulator NF-kappaB and is implicated
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CC mRNA that do not form secondary folding structures and that contain
CC potential hammerhead and hairpin ribozyme cleavage sites were identified
CC by computer analysis. Ribozymes directed against these mRNA sequences
CC were designed and synthesised with modifications that improve their
CC nuclease resistance. The ribozymes are designed to cleave the target
CC sequences and thereby inhibit relA expression, making them potentially
CC useful for treating rheumatoid arthritis, restenosis and asthma as well
CC as for increasing tolerance to transplanted tissues. The potential
CC immunosuppressive properties of a ribozyme that cleaves relA mRNA means
CC that uses are limited to local delivery, acute indications or ex vivo
CC treatment. (Updated on 25-MAR-2003 to correct PI field.)
XX
XX Sequence 15 BP; 2 A; 7 C; 1 G; 0 T; 5 U; 0 Other;
SQ
Query Match 0.5%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 5.1e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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PR 08-SEP-1994; 94US-00303039.
PR 23-SEP-1994; 94US-00311486.
PR 28-SEP-1994; 94US-00311749.
PR 28-SEP-1994; 94US-00314397.
PR 03-OCT-1994; 94US-00316771.
PR 07-OCT-1994; 94US-00319492.
PR 11-OCT-1994; 94US-00321993.
PR 04-NOV-1994; 94US-00334847.
PR 10-NOV-1994; 94US-00337608.
PR 28-NOV-1994; 94US-00345516.
PR 16-DEC-1994; 94US-00357577.
PR 23-DEC-1994; 94US-00363233.
PR 30-JAN-1995; 95US-00380734.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Stinchcomb DT, Chowrira B, Drenzo A, Draper KG, Dudycz LW;
PI Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, Meswiggen JA;
PI Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
PI Tracz D, Usman N, Wincott FE, Woolf T;
XX
XX WPI; 1995-351090/45.
XX
XX Ribozymes having modified bases and methods for producing them - for use
XX in inhibiting disease related genes.
XX
XX Claim 2; Page 229; 407pp; English.
XX
XX The present sequence represents a preferred target sequence for an
XX enzymatic nucleic acid (i.e. a ribozyme) which cleaves relA mRNA at the
XX nucleotide base position indicated in the DE line. The relA gene product
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XX that uses are limited to local delivery, acute indications or ex vivo
XX treatment. (Updated on 25-MAR-2003 to correct PI field.)
XX
XX Sequence 15 BP; 2 A; 9 C; 3 G; 0 T; 1 U; 0 Other;
XX
XX Query Match 0.5%; Score 11.8; DB 1; Length 15;
XX Best Local Similarity 80.0%; Pred. No. 5.1e+02;
XX Matches 12; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 1084 CCAGGCTTCACCCC 1098
XX |||||: |||||
XX 1 CCAGGCGUCCAGCCCC 15
XX
XX RESULT 831
XX AAT54944
XX ID AAT54944 standard; RNA; 15 BP.
XX AC AAT54944;
XX
XX DT 25-MAR-2003 (revised)
XX DT 07-APR-1997 (first entry)
XX
XX DE Mouse relA hammerhead ribozyme target sequence (nt. position 1082).
XX
XX Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
XX gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
XX intercellular adhesion molecule; rel A; tumour necrosis factor;
XX TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
XX translocation; chronic myelogenous leukaemia; CML; cancer;
XX Philadelphia chromosome; inflammation; autoimmune disease;

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KW atherosclerosis; myocardial infarction; stroke; restenosis;
KW transplant rejection; rheumatoid arthritis; psoriasis;
KW myocardial ischaemia; Kawasaki disease; septic shock; HIV;
KW human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
KW ss.
XX
XX Mus musculus.
XX
XX WO9523225-A2.
XX
XX 31-AUG-1995.
XX
XX 23-FEB-1995; 95WO-IB000156.
XX
XX 23-FEB-1994; 94US-00201109.
XX 29-MAR-1994; 94US-00218934.
XX 04-APR-1994; 94US-00222795.
XX 07-APR-1994; 94US-00224483.
XX 15-APR-1994; 94US-00227958.
XX 15-APR-1994; 94US-00228041.
XX 18-MAY-1994; 94US-00245736.
XX 06-JUL-1994; 94US-00271280.
XX 15-AUG-1994; 94US-00291332.
XX 16-AUG-1994; 94US-00291433.
XX 17-AUG-1994; 94US-00292620.
XX 19-AUG-1994; 94US-00293520.
XX 02-SEP-1994; 94US-00300000.
XX 08-SEP-1994; 94US-00303039.
XX 23-SEP-1994; 94US-00311486.
XX 23-SEP-1994; 94US-00311749.
XX 28-SEP-1994; 94US-00314397.
XX 03-OCT-1994; 94US-00316771.
XX 07-OCT-1994; 94US-00319492.
XX 11-OCT-1994; 94US-00321993.
XX 04-NOV-1994; 94US-00334847.
XX 10-NOV-1994; 94US-00337608.
XX 28-NOV-1994; 94US-00345516.
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XX treatment. (Updated on 25-MAR-2003 to correct PI field.)
XX
XX Sequence 15 BP; 4 A; 5 C; 3 G; 0 T; 3 U; 0 Other;

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